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NORTH CAROLINA MEDICAL JOURNAL.

THOMAS F. WOOD, M. D., Editor.

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ORIGINAL LECTURES.

TREATMENT OF THE DROPSICAL FORMS OF DISEASES OF THE HEART.*

By Professor GERMAIN SÉE.

Member of the Academy of Medicine, and of the Faculty of Medicine, Paris, France.

Gentlemen :—From the point of view of treatment, we must distinguish two varieties of dropsies, which may make manifest or complicate a disease of the heart.

1. The œdema of the extremities which sometimes appears as the initial phenomenon, and later on changes into general dropsy marking the advanced periods of cardiac lesions. The same treatment is required for the partial and the general affection.

2. The dropsy which results from coëxisting disease both of the heart and kidneys.

*Delivered in "La Charite" and translated for the NORTH CAROLINA MEDICAL JOURNAL, by permission of the Professor, by E. P. Hurd, M.D., of Newburyport, Mass.

TREATMENT OF SIMPLE CARDIAC DROPSIES.

The simple cardiac dropsies demand both diuretic and purgative treatment.

Among the diuretics I shall have occasion to recommend the following as being especially useful:—milk, convallaria, digitalis, squills, and certain accessory means which sometimes further the removal of dropsical effusions.

1. Milk ought almost exclusively to be administered in grave cases. Let your patient drink it freely and use no other drink or food, taking three or four quarts a day. In the œdemas of the initial stage give milk in less quantity as aliment and diuretic; one or two quarts a day.

2. The Lily of the Valley is the most powerful of diuretics in cardiac dropsies, and will succeed when given alone, and without the aid of milk.

3. Digitalis (to which I shall soon allude again) has the frequent disadvantage of provoking nausea, of taking away the appetite, and causing constipation.

4. Squills and the diuretic wines containing squills, sometimes, though rarely, act better than digitalis.

5. Accessory or doubtful means. The diuretic herb ptisans, (pyrola, parsley, broomtop, cleavers, etc.) the white wines, beer, the gaseous waters have no certain durable action, and present serious inconveniences.

GENERAL CONSIDERATIONS RESPECTING DIURETICS.

The most powerful cardiac medicaments, namely, digitalis and convallaria have a triple medicinal property, that is, to say, they act at the same time as cardio-vascular remedies, as respiratory medicaments, and as diuretics.

Under the first head they surpass all other modifiers of the circulation, central and peripheral.

As far as being respiratory medicaments is concerned, they are preferred to the preparations of iodine, and to erythrophlæum.

As diuretics, they occupy indisputably the first rank, and we can establish the following hierarchy:

1. First, in general repute, if not in importance, is digitalis, whose

diuretic action is due to augmentation of intra-renal vascular tension, which is produced under the influence of the remedy.

2. *Convallaria* has the same mode of action, and its diuretic properties are far more prompt, more energetic and more enduring than those of *digitalis*.

3. Milk ; its diuretic effects result from its very composition, and not from the increase of intra-vascular renal pressure, augmenting the secretion of urine, (as is the case with *digitalis*) its diuretic components are sugar of milk and salts of potash, which by their dialytic action seem to facilitate the exosmosis of the water of the blood as I have shown in my treatise on the dyspepsias.*

The indications for milk are so clear and positive in cardiopathy with dropsy, that the milk-treatment suffices often of itself to cause the disappearance of dropsical effusions.

4. Squills is often prescribed as an adjuvant of *digitalis* ; it has most of the inconveniences of the latter without the advantages. It enters into the composition of a great number of preparations known as diuretic wines, etc., whose diuretic power is very variable; in the diuretic wine of the Hotel Dieu it is associated with *digitalis*; in that of "La Charité" it is combined with bitters.

5. Caffeine, employed for many years past by Dujardin-Beaumetz, has been recently considered by Lépine and Hachard as a powerful diuretic, possessing at the same time a regulating action on the heart, in certain forms of asystolism, which are still undefined, but in that form especially which Gubler has described under the name of cardio-plegia, or paralysis of the heart.

Before pronouncing on the value of this medicament, I wait for more precise explanations, and especially for a more serious study of its physiological effects.

At first the dose used to be from five centigrams to three grams, (1 to 45 grains), but Hachard recommends with good reason the larger dose.

The physiological action must vary as the dose is fractional or large, therefore we are not surprised at the discrepancies which characterize the therapeutical history of this drug. Some say that caffeine augments the secretion of urea, and raises the temperature,

*V. Studies on the uses of Milk in "Les Dyspepsias, Gastro-Intestinales," by Germain Sée, Paris, 1881.

others say that it is a restrainer of waste (*moyer d'épargne de la denutrition*) ; this would result in a lessening of urea, as well as of bodily heat.

Certain observers have noted an augmentation of vascular pressure, others the contrary.

The diuretic power of caffeine on which Lépine and Hachard rightly insist, is formerly denied by Nothnagel and Rossbach ; certain it is, that as a diuretic it is inferior to digitalis.

Caffeine itself is supposed to be a well defined product, but the citrate of caffeine in common use is only caffeine with lemon juice.

Aubert and Dehn deny *in toto* the action of caffeine, attributing its effects on the vascular and renal system to ingredients contained in the vegetable product from which it is obtained, that is to say, to the salts of potash contained in coffee, (or guarana.)

For want of more reliable data we betake ourselves to clinical experience, and here we are disposed to place much weight on the carefully conducted observations of Hachard.

6. The alkaline diuretics, as nitrate of potash, have a doubtful action; and they may even, by their debilitating effect on the heart, do great harm. If you give a very small dose of these saline diuretics, you get no diuretic action at all, and if the dose is large, you may see serious and even fatal results; such as were noted years ago when it was the fashion to treat acute rheumatism by 15, 20, and even 30 grams (from half an ounce to an ounce) of nitre each day.

Bromide of potassium is the only potash salt which I employ; it is at the same time diuretic and a cardiac sedative.

PURGATIVES.

Purgatives are of considerable utility, but considered as an exclusive means of treatment, they do not compare with diuretics in usefulness. I have shown, in fact, (see article "Purgatives" in my treatise on the Dyspepsias) that purgatives of every kind do not deprive the blood of its watery part; they evacuate the liquid contents of the intestines, that is to say, the intestinal, biliary, pancreatic juices, as well as the liquid alimentary mass before it has had time to be absorbed ; they are real denutrients. Diuretics, on the contrary, are veritable promoters of the urinary secretion, they deprive the blood of its water, and thus favor the resorption of

liquids effused into the cellular tissue, without in any way impair the general health.

You ought not then to count on purgatives in dropsies as you count on diuretics; but in order to give a little respite to the urinary organs, fatigued by hypersecretion, it is a good thing to prescribe purgatives, among which a rigorous choice should be made, the emeto cathartics being absolutely proscribed, for when you have dropsy of cardiac origin vomiting is dangerous.

1. Salts and saline mineral waters are not suitable except in large doses; in small doses, the salts of soda or magnesia which generally pass out of the system in part by the kidneys, act as diuretics, they do not act as purgatives.

2. The drastic purgatives (Comp. Tinct. of Jalap of the German Ph; extract of colocynth, resin of jalap, elaterium, etc.) are infinitely more useful for the reason that their action in expelling the intestinal liquids is far more marked than that of saline substances; but you ought not to forget that their good effects are never lasting, and that you cannot continue the use of these remedies without provoking gastro-intestinal troubles and denutrition.

Contra-Indications.—Opium, morphia, belladonna, which have the serious disadvantage of suppressing the intestinal and renal secretions ought not to be prescribed in cardiac dropsies.

TREATMENT OF DROPSIES OF CARDIO-RENAL ORIGIN.

In these dropsies we also employ diuretics and purgatives, and we add diaphoretics. Milk ought to be administered in large quantities and ought to be the exclusive treatment, at least for a time. Give three or four quarts a day, cold or warm, but not cooked; this milk may be pure, or brandy, rum or other spirits may be added to it. Digitalis, squills and convallaria must be given with great circumspection, if given at all, by reason of their action on the kidneys which are diseased. If you should give convallaria bear in mind that this medicine sometimes determines in the urine a precipitate which resembles albumen, but is really the resin of the medicament, which passes in the state of emulsion into the urine, as is observed in the case of other resins.

In dropsies of renal and cardiac origin the drastic purgatives are especially useful, the most energetic, the irritant cathartics such as

gamboge, croton oil, oil of caper spurge, elaterium, etc., are those which have obtained the most *éclat*, but their efficacy is not in the ratio of their violence of action.

DIAPHORETICS—VAPOR BATHS—FUMIGATIONS.

Diaphoretics have enjoyed a great reputation in renal dropsy, and just as physicians have sought to eliminate the water of the blood by the urine and by the intestines, they have sought its elimination by the cutaneous glands. By all these means of evacuation, the blood, according to the theory, ought to become less fluid, the veins less distended by their contents, and the absorption of liquid exudations ought to be singularly facilitated. For this end they have for a long time employed sudorifics, internal and external, and among others, vapor baths, and dry fumigations. The latter have not had much success, having proved inefficacious for the object for which they were designed (promotion of resorption) and they are really dangerous when there is any cardiac complication as there so often is in parenchymatous nephritis; and especially when the cardiac lesion is primitive, and the renal secondary.

Jaborandi—Pilocarpine.—Diaphoretics had fallen into oblivion when Dr. Continho called attention to the diaphoretic effects so energetic and so constant of jaborandi. Still later, my chief of the laboratory, M. Hardy, succeeded in extracting from jaborandi its active principle, pilocarpine, which can be administered hypodermically. In six trials of this remedy in dropsy of nephritic origin injections of from one to three centigrams (1-60th to 1-20th a grain) of nitrate of pilocarpine failed completely. The physiological effects of jaborandi and its alkaloid were indeed, observed, namely, repeated vomitings, a tremendous salivation, and an excessive diaphoresis, but never, in spite of repeated attempts in the same patient during four or five successive days, did we obtain the least modification in the state of the dropsy, nor any effect on the kidneys or heart.

There are great difficulties in the way of treatment of these dropsies of complex origin.

TREATMENT OF CARDIO NEPHRITIC DROPSIES, COMPLICATED WITH
DYSPNŒA, OF THE SAME KIND.

When to a dropsy of cardio-nephritic origin, is added nephritic or uræmic dyspnœa, the difficulties augment still; in these cases iodide of potassium ought to be added to the milk regimen, and to the digitalis. In these cases also, you must not fail to note the dangers of morphine injections, which not only prevent the milk from acting on the kidneys, but may accumulate in the blood by reason of the renal insufficiency. If, in fine, in this disease the dropsies persist, if you are obliged to have recourse to scarifications and punctures of the extremities in order to obtain direct evacuation of liquids effused in the cellular tissue of the limbs, the life of the patient is seriously compromised. I have rarely seen this surgical treatment succeed, which, in a few instances, it has been necessary to repeat again and again for almost two years, during which time the patient was bathed night and day in the serosity which oozed from the punctures; thus far I can reckon only three really successful results obtained by this procedure.

ANECDOTE OF SIR THOMAS WATSON.

When attending Lawrence, the great surgeon, when he had hemiplegia with aphasia, it was thought desirable to give the patient some sedative. Lawrence knowing this and wishing to indicate what remedy he desired, was unable to find the word he wanted, and became greatly agitated in consequence. Sir Thomas Watson got pen, paper, and ink, and asked him to write the word. This he could not do, but taking the pen full of ink, made a large splash on the paper, and offering it to those at his side. Sir Thomas Watson at once perceived the drift of this, and saw that his patient wished for the "black drop," a discovery which greatly delighted and satisfied Lawrence.

SELECTED PAPERS.

MERCURIALS IN DISEASES OF THE LIVER.

The following abstract is from Dr. Harley's late and very important work on the Diseases of the Liver noticed in our Review column of this issue. It will not fail to interest and instruct our readers, and convey to them an idea of the value of the volume from which it is extracted :

After having been in use among all ranks and classes of society for generations, mercury may be still looked upon as the physician's mainstay in the treatment of the majority of liver cases. Every housewife knows that a dose of calomel at bed-time, followed by a black draught in the morning, will suffice, in the vast majority of cases, to cure an attack of biliousness in twenty-four hours after its administration. At the present moment a change has come over the spirit of the physician's mercurial dream, and the poor old drug has been placed at the bar like a suspected criminal "on trial," on account of experimental physiologists having found, that when administered to the canine species, it does not behave itself in what, according to old-fashioned notions, might be called an orthodox manner.

The hostile therapeutists stand opposed to each other thus : Those of the practical clinical school declare that mercury is a powerful hepatic biliary stimulant, while those who adopt the views of the experimental physiological school as emphatically declare that mercury has no effect whatever in exciting or increasing the biliary secretion, either in men or in dogs. Now comes the question which side is right, and which side is wrong ? Both sides most assuredly cannot be right, though both sides equally certainly may be wrong.

Mercury, it is said, might be a powerful hepatic biliary stimulant in the human, and perfectly inert in the canine species. This opinion was arrived at by a process of reasoning from analogy. For it is not only well known, but a perfectly incontrovertible fact that not only one, but many therapeutic and toxic substances act not alone with varying degrees of intensity, but even in a diametrically contrary manner, when administered in precisely the same form and in the same way to different species of animals. I could easily cite a dozen of examples of the action of the different poisons in proof

of this statement: but it is quite unnecessary for me to do more than remind the reader of the well known and most extraordinary one, that goats eat hemlock with impunity, while sheep instantly succumb to its poisonous action. Nay more, that the milk of the goat fed on hemlock leaves poison the adult human being, while the little delicate kid not only relishes, but actually thrives, upon its mother's poisoned milk. It is perfectly evident then, that the contradictory effects of poisonous substances when administered to different species of animals, may, with an apparent good show of reason, be given as true explanations of the contradictory results obtained from the action of mercurials on human and canine livers.

This explanation does not at all satisfy me, for I have yet to be convinced that mercury *does* act differently upon dogs from what it does upon men. My experiments upon the toxic effects of mercury both in suddenly administered large doses, and with insidiously daily administered small doses, varying in duration of time from 14 to 120 days, have led me to the belief that the action of mercury on the liver of the dog is precisely the same as it is upon the liver of the human being. For be the rationale of the action of mercury upon the human organism what it may, I hold it as an undeniable fact, that after the sudden administration of large doses of mercury to healthy dogs as well as to healthy men, a variable but always considerable increase of bile is detectable in the fæces both by the pigmentary and bile acid tests.

I do not imagine that there is a single person who has taken part in the discussion that will seek to deny that, after a smart dose of mercury, not only do the human fæces look as if they were loaded with bile, but that the patient even occasionally complains that the passage of the stool through the anal orifice has produced a feeling of smarting, or hot scalding, which smarting can be due to nothing else than the irritation produced by an excess of the bile-acids in the stool. Moreover, I think that no one at all versed in the literature of liver diseases will seek to deny that several independent observers are said to have noticed that an increased flow of bile has taken place from accidental human biliary fistula after the administration of a brisk mercurial cathartic to the patient. Every one will, I believe, at the same time admit that neither an increased elimination of bile by the stool, nor through the fistulous opening

directly connecting the gall-bladder with the exterior of the body, is any proof whatever of an increased SE-cretion of bile by the liver having taken place, but is merely positive proof that an increased EX-cretion of bile has occurred, and that in either case the expelled bile may not have been issued, and most probably did not issue directly from the liver at all, but only from the gall-bladder, which had received it from the liver some time previously, and had it stored up in its interior ready for excretion at any given moment.

Not only may bile be secreted in great quantity, and yet not excreted in consequence of the gall-bladder—its reservoir—being sufficiently capacious to retain it; but a large quantity of bile may be excreted at a time when little or none at all is being secreted; that excreted being merely the bile that has been secreted some time previously, and been retained stored up in the gall-bladder, as above said, until the proper moment for its excretion arrived. While again, according to my views of the matter, this excretion of pent-up bile independent of secretion may be entirely due to the brisk action of a mercurial—in the following wise:

Bile is only expelled from the gall-bladder as a result of the mechanical effect of its contraction. Its muscular contraction is called into play by reflex nervous action. And, in the normal state at least, this is brought about by the periodic stimulus given to the peristaltic action of the duodenum during the passage through it, of the irritating acid chyme—from the stomach. The stimulating effect of the acid chyme on the muscular coat of the intestine being communicated by reflex action back along the common bile duct from its duodenal orifice, to the muscular coat of the gall-bladder, which in its turn is thereby excited to contraction, and expels the necessary amount of bile into the intestines to play its physiological chemical rôle in the digestive process, by which mechanical contraction of the gall-bladder, moreover, its contents—bile—if not expelled, under the normal circumstances, along the common bile-duct into the duodenum, may be under the abnormal circumstances expelled through a fistulous opening in the abdominal walls, directly to the exterior of the body, and give rise to the condition that has been described as above by different observers. In opposition to the latter part of this theory, again, we have the, at first, sight, apparently irreconcilable statement of experimental

physiologists, that mercurials have *no effect whatever* on the quantity of bile eliminated through a biliary fistula in a dog. How is this? To me it appears to be not another example of scientific discord, but simply of scientific "harmony not understood." And now for the explanation. What is it that the experimental physiologists tell us? Merely this,—that when a dose of calomel is given to a dog with a gall-bladder fistula, after the common bile-duct has been secured by a ligature, in order to prevent any bile escaping unnoticed into the intestines, *no visible* increase takes place in the quantity of bile flowing from the orifice of the fistula. Now, this is of course a perfectly conclusive statement. But of what? Certainly not that the administration of a dose of calomel does not produce bilious stools, either in a dog or in a man, but merely that a dose of calomel does not produce bilious stools, either in a dog or in a man, but merely that a dose of calomel does not increase the *se-cretion* of bile by the liver. Which is quite another thing. The emptying of a distended gall-bladder of its bile being a thing which a dose of calomel *can do*. The stimulating of a healthy liver to *se-crete* bile being a thing which a dose of calomel *cannot do*.

* * * * *

As every medical practitioner well knows, when he administers a sufficiently large dose of a cathartic mercurial to a bilious individual, a large, black, tarry stool comes away.

Look again at the effect of calomel on the stools of a child at the breast. Normally the stools are of a pale straw color; but give a dose of a mercurial, and immediately they become of a distinctly bilious green hue, the bile being in many instances in sufficient quantity and sufficiently concentrated to scald the anus during its exit. It is not, however, the bile which has just been *se-creted* that then alone comes away, but the accumulation of thickened tarry bile, which has been, perhaps for days or weeks, stored up in the gall-bladder, that the mercurial has all of a sudden expelled from the viscus, the sudden expulsion of the accumulated bile from the gall-bladder being due to the stimulating effect of the mercurial on the peristaltic action of the duodenum; its irritative, or, physiologically speaking, stimulative effects on which being communicated, by reflex nervous action, along the bile-duct to the

gall-bladder, and thereby exciting to immediate contraction its muscular coat. By which contraction the biliary contents of the viscus are suddenly expelled into the intestines, and give origin to the tarry bilious stools.

While giving this as my theory of the immediate effects of mercury on a bilious patient, it is by no means all that I have to say upon the rationale of the curative effects of mercury in hepatic diseases. An equally important and more intricate one has now to be considered, namely, its beneficial action in all the various forms of congestion of the liver, and consequently, of course, in all cases of jaundice the result of hepatic congestion.

While admitting that there is sufficient evidence derivable from physiological sources to prove that mercury has no power to stimulate the normal liver to secrete bile, I shall now endeavor to prove that I am justified in holding and in promulgating the theory that in certain cases of diseased liver, where the biliary secretion is retarded, or even arrested, in consequence of a congested condition of the tissues of the liver, mercury has a powerful, though only an indirect, effect in restoring the biliary secretion. Not alone in the human, but equally so in the canine, bovine, and equine species. And this it does, I believe, by means of its antiphlogistic action upon the hepatic capillaries; by subduing, if not indirectly actually removing, the condition of the blood vessels, it relieves the secreting structures from the mechanical pressure arising from the congestion of the bloodvessels, which prevents the hepatic cells from secreting bile.

* * * * *

The further beneficial effect of mercurials, in many other forms of hepatic derangement, appears to me to consist in a great measure in the powerful repeated doses—even small doses—of mercury have upon the blood, particularly on its red corpuscles. A large dose of mercury, by inducing liquid stools, not only reduces to a certain extent the total volume of blood in the circulation, but it at the same time impoverishes the blood by its disintegrating power on the cell-walls of the red corpuscles, and thereby allowing their nutritive contents to escape. Small doses again—not large enough to produce purging—though they may not directly reduce the total volume of the blood, still nevertheless act by impoverishing it.

For no matter however small a quantity of mercury finds its way into the circulation, I believe from the results furnished to me by my experiments on the action of mercury on animals, that a directly proportional impoverishment of the blood invariably takes place. Sir Thomas Watson has poetically said that mercury can blanch the cheek of the rose to the whiteness of the lily, and nothing, I believe is more true. For in experimenting on animals, I have found the prolonged use of mercury reduce the red blood corpuscles in a marked manner; reckoning by the eye when they are viewed through the microscope, I should be inclined to say, at least one-fourth. From this it is easy to understand how mercury acts in inflammatory affections; and as in the majority of cases of jaundice from suppression, the stoppage of the biliary secretion is due to active congestion of the liver, mercury proves beneficial in such cases, not by directly stimulating the suppressed biliary secretion, but by simply removing the obstacle to its reëstablishment, namely, the hepatic congestion, in the two ways just indicated.

* * * * *

Like most other men actively engaged in practice, I have three favorite grades of mercurials, of gradually decreasing strength, suitable for patients of different ages, sexes, and constitutions.

At the head of the list stands our old and venerable friend Calomel, in his from three to six grain doses. Next in order of sequence comes Blue Pill, which again in its turn is followed by the less severely acting Gray Powder. One and all of these to be given at bed-time; but *not to be followed in the morning by a purgative*—as was the almost habitual practice some years ago—unless the bowels will not act within twelve hours without one. Severe purgation I have over and over again found to be not only uncalled for, but even detrimental, in all except fat, fleshy plethoric patients, who appear to require reducing. All that is required—unless we desire to salivate—being to cause one free and copious action of the bowels. Not half-a-dozen, as was formerly considered to be requisite. Consequently, before telling a patient to take opening medicine in the morning after a nocturnal dose of mercurial, I always inquire if the bowels are easily moved, and unless they are not I prescribe none—except he be at the same time a person of the above-described constitutional type. Should I consider a matinal

purgative desirable, then I usually select the one the patient is most accustomed to, regulating its strength according to circumstances, but in all cases giving strict injunctions not to take the purgative along with the mercurial at night. For I have the idea that no matter in what form the mercury be given, it always acts best upon the biliary function of the liver, through its direct action upon the blood when administered alone. If, however, prescribing for a trifling bilious attack, I pay no attention to this rule, and may advise a five grain pill of equal parts of ext. colocynth and blue pill to be taken at bed-time; but whenever I desire to act on the biliary function of the liver thoroughly, I give the mercurial alone, following it up with the purgative, when necessary, eight or ten hours later, with the view of simply increasing the peristaltic action of the duodenum and by reflex action stimulating the gall-bladder to contract more powerfully and the better be able to expel its bilious contents. Moreover, for a precisely similar reason—namely, non-interference with the cholagogic action of the mercury—it is that I prefer giving it on an empty stomach. For if the stomach is loaded with food when the drug is taken, or if food is introduced into the stomach after the mercury has been administered, and before it has had time to produce its therapeutical action through the blood on the liver, not one-half of its beneficial effects are, I believe, obtained.



VOIGHT'S EXPERIMENTS IN THE TRANSMUTATION OF VARIOLA.—Dr. H. A. Martin, of Boston, in a private letter to the Editor of the JOURNAL, announces that he will institute at once the experiments of Voight, described in the December JOURNAL, at his own expense. We are glad to know that the confirmation or refutation of this work is in the hands of the foremost vaccinologist now living.


An account of the wounds and of the death of Stonewall Jackson appear in the *American Medical Weekly* for January 6, and although a thrice told tale, cannot fail to touch the hearts of those who followed his fortunes on the bloody field of Chancellorsville.

EDITORIAL.

NORTH CAROLINA MEDICAL JOURNAL.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY, PUBLISHED
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THOMAS F. WOOD, M. D., Wilmington, N. C., Editor.

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CONFERENCE OF THE STATE BOARD OF HEALTH WITH THE COUNTY SUPERINTENDENTS OF HEALTH AT THE CAPITAL.

Responding to a call sent out by the State Board of Health, and published in the JOURNAL of December, a number of representatives of both bodies met at the Yarborough House, on Tuesday the 9th inst. The State Board was represented by Prof. Simmons, of Wake Forest, Dr. Geo. A. Foote, of Warrenton, and the Secretary of the Board. Superintendents of Health from several counties were present, as follows: Dr. J. M. Stansill, from Richmond County; Dr. J. E. Green, from Halifax; Dr. Geo. A. Foote, of Warren, (who is also a Superintendent of Health and member of the State Board), Dr. W. T. Ennett, of Pender; Dr. James McKee, of Wake; Dr. J. J. Summerell, of Rowan; Dr. J. D. Roberts, of Wayne; Dr. J. W. Jones, of Wake Forest; Dr. J. G. Ramsay, of Rowan; Dr. C. Thomson, of Onslow; and subsequently Dr. Turner, of Moore, and Dr. Beall, of Davidson, were present.

Dr. Summerell, of Salisbury was appointed Chairman and Dr. J. D. Roberts Secretary.

The matters for consideration by the conference were explained by the Secretary of the State Board, as follows:

The amendments required to make the present law operative, could be briefly stated. The Governor in his message called the attention of the General Assembly to the fact, that although the Constitution of the State required the formation of a BOARD OF CHARITIES AND CORRECTION, the law had not been complied with, and that practically no such Board existed. The Board of Health had been working out the problem under the law.

The following is from the Governor's message :

“ STATE BOARD OF HEALTH AND BOARD OF PUBLIC CHARITIES.

“ I beg to call your attention especially to the report of the Board of Health, and to ask for this organization more favorable legislation than it has heretofore received. The Board, animated by the humane desire to do something to guard the health and lives of the people, has worked for years without proper recognition from the State. It is time that something should be done in the way of pecuniary aid. I am sure they will not ask for anything unreasonable. In this connection, I desire to call your attention to Section 7, Article XI, of the Constitution, and to Chapter 94 of Battle's Revisal, on the subject of a 'Board of Public Charities.' There is not now, and has not been for years, any such Board, although it is expressly required. Such a Board could be made useful, if required to inspect our penal and charitable institutions, jails and other places where prisoners are kept confined, and make detailed reports to the General Assembly. The practical suggestion I wish to make is, that you make the State Board of Health the Board of Public Charities, and that you make a reasonable appropriation to pay the expenses of this Board when in the discharge of its public duties.”

The Governor had shown a true appreciation of the service the Board of Health had rendered the State, in suggesting a coalescence of the two laws. He saw in the Board of Health the elements necessary to success, and in it a hope for the future of the constitutional requirements as regards the sanitary condition of the chari-

table and penal institutions of the State. The original law had been put in the hands of Dr. C. Tate Murphy, a former State Senator, and Chairman of the Board of Charities and Correction, but upon his withdrawal from the public service, the whole work had fallen into desuetude. Dr. Murphy had also been an ardent supporter of the State Board of Health, until his failing health ended his career.

We do not forget that in the State [of Massachusetts, the Board of Health of that State, had been merged into the Board of Public Charities, thereby impeding the work ; but that State did not have an organization like ours. There was no good ground upon which detriment to our Board of Health could be prognosticated, by a future merging into the Board of Charities and Corrections. For was it not true that the State Board [by aid of its auxiliary county boards had already taken up the work of the sanitary supervision of the jails, work-houses and poor-houses of the State ? The State Board is on record in its "First Biennial Report," showing with how much care the work has been done, making a very strong and favorable contrast with the unorganized work of the Board of Charities and Corrections, until the State Board of Health had demonstrated the practical working of a dead law, so that, the North Carolina Board of Health really had nothing to fear of a coalescence which had been unconsciously in existence several years.

After this explanation by the Secretary, a committee was appointed to make a new draft of the law, incorporating the amendments proposed in the Governor's message.

The substance of the proposed law is as follows :

1. The State Board of Health to assume all the duties set forth in the law creating the Board of Charities and Corrections.
2. The composition of the Board to remain as at present.
3. The State Board to take cognizance of the health interests of the State, making all investigations necessary to obtain information about the introduction and progress of epidemics; to be sanitary advisers of the State; to make inspection of State institutions; to pursue special studies appertaining to their work, and when necessary to call in the assistance of experts.
4. The members to be elected and appointed as formerly.
5. The officers of the Board to be a President, Secretary, and

Treasurer, the Secretary to receive such compensation as the Board may allow.

6. The auxiliary County Boards to remain as at present, and their duties to be as prescribed by the law, and their salary to be left to the county and town authorities, but to be based upon the fees current in the county in which a Superintendent serves.

7. Directs the time of meeting of the State Board.

8. Provides for monthly reports of Superintendents to the Secretary of the State Board.

9. Refers to the conduct of inland quarantine, making the fine for its violation \$200, and enjoining upon Superintendents to give all aid in their power to the maritime quarantine.

10. Directs the process for the abatement of nuisances dangerous to the public health.

11. Provides for the proper vaccination of persons coming under the care of the State and Counties; provides for a supply of vaccine to be kept by the Secretary; and asks for \$200 for this purpose.

12. Provides for issue of Bulletins of warning, on matters appertaining to pestilential disease, and the means of preventing their spread; also provides for the circulation of information upon all topics which in the discretion of the Board affect the health interests of the people.

13. About special meetings of the Board.

14. Provides for analyses of water, food, drugs, &c., by the Agricultural Department.

15. Asking the State for \$3000 annual appropriation, and printing, and stationery necessary.

16. Repealing all laws conflicting with this.

The discussion of all the items entering into this bill was prolonged and earnest, and the final conclusion of the work reached, was left to the consideration of the friends of the Board in the Senate and House of Representatives.

We trust our efforts to the General Assembly with more confidence than heretofore, and we believe the prospects are good for a successful issue of our labor. We may be able before this number closes to give more definite information.

Washington City is now the medical literary centre of this country, and the medical man who finds himself there with a few days of leisure at his disposal, naturally embraces the opportunity to enjoy the learned atmosphere of her celebrated libraries, and view in person in the Army Museum, the actual morbid specimens which have come under his admiring eye—so often in the “Medical and Surgical History of the War.”

The word libraries is used advisedly, for there are now two medical libraries, that would prove attractive to a city with more attractions than Washington.

The “Toner Collection” presented to Congress a year ago, has found a safe resting place in the capital. The librarian is now busy arranging this huge mass of books, preliminary to rebinding and indexing, and he has just finished counting the number of volumes. Dr. Toner estimated them at the time of his donation at about 25,000, but by actual count there are but a little under 40,000. True, this includes bound books and pamphlets. In the Library of Congress, an alcove is set apart for the historical and biographical part of this collection, from the Revolutionary period to 1800, choice and all but inaccessible volumes, made up of items drawn from every available source, none so trivial or common-place as to have escaped the quick eye of the veteran collector. The alcove is now designated by the inscription “Toner Collection,” but is to be qualified by a more explicit designation, and, we trust, adorned by a portrait or bust of the generous donor.

This large collection has been the life-time work of a now ripe and venerable medical scholar, and is by far the largest collection of medical “Americana” in existence. As far as we can see the collector carried out a well-matured plan to bring together all the volumes and contributions of every sort, to illustrate the growth of medical science in this country.

When it is remembered that medical works of the Revolutionary period, and previous to that date, and those published up to the second American war, were getting very rare year by year, he will understand how great a service Dr. Toner has done in rescuing all this literature from destruction. The time referred to was not

prolific of valuable medical books, for then, as for the time as recent as 1861, medical literature had scarcely any existence in America except in the reprints of English and sometimes French works, and the few medical journals then published.

Such a dearth of medical publications (and this applies to scientific works outside of medicine, especially of botany) can hardly be realized until one starts out in pursuit of information from books of the date 1780—1801, for instance; he will have to give a vast deal of inquiry among the old book stalls before he will chance upon the thing he is looking for. Just as likely as not he will finally entrust an order to Kimpton, in London, or Friedländer, in Berlin, before his wants are supplied. After all the work of collecting books in a certain line, can only be done by one fully in love with the work, and with sufficient means, and such men are rare in this country just now.

To return to the "Toner Collection." One who has visited the old home of this library, the home of the collector, on Louisiana Avenue, and enjoyed the rare treat of an inspection under the genial hospitality of the host, will look with regretful eye upon the now all but bookless shelves. The better-half of the old house is separated forever, and the heart of the host is divided between his two haunts. But let the searcher after rare bits from the older American writers, turn his face towards Washington and he will not come away empty if he has the habits of a student and will consult the "Toner Collection."

Should he fail there though, and his quest should be in the direction of the ancient writings of the masters, let him visit the NATIONAL MEDICAL LIBRARY, for it is a most famous collection, abounding in astonishingly old volumes, and in exquisitely fine volumes, of all times and all nations. As this vast collection grows under the skilled management of Dr. Billings, and volume after volume of the index to it is issued, and one becomes more and more familiar with the index, the magnitude of the undertaking, and its value to the medical profession will just begin to be realized. It is no longer a wilderness of books, but a working library, opening its wide arms to embrace the medical scholars of the whole nation, and offering its facilities freely to all students. Such a library not only stimulates authorship, but its whole tendency is to make authors more accurate.

The Army Museum in the same building is in the hands of Dr. D. L. Huntington, and is increasing in interest and usefulness year by year. These two admirable institutions are lasting monuments of the little good that resulted from the war.

Washington, we repeat is the centre of the medical literature, and as suggested by Dr. Theophilus Parvin, is admirably adapted to be the home of the proposed Journal of the American Medical Association.

APPOINTMENTS IN NORTH CAROLINA.

Preparatory to the organization of the new Insane Asylum at Morganton, the Board of Directors met on the 7th December and elected Dr. P. L. Murphy, formerly of Wilmington as Superintendent, and Dr. W. D. Hilliard, of Asheville, as Assistant.

These selection meet the hearty approval of the medical profession. Dr. Murphy is a young physician, who for several years past has been engaged in Staunton, Va., as an assistant in the Insane Asylum there. He brings to his task a vigorous constitution, a thorough medical training, and a love for his specialty.

Dr. Hilliard is also a young physician, of excellent repute, and although with no previous training in this branch of medicine, will make an admirable assistant.

We believe the Directors were wise in placing this task upon young men, and more especially in making such selections. The task of organizing a new Insane Asylum, especially from the foundation, as in this case, is no easy task. The new officers find themselves in charge of a huge building, magnificent though it is, yet only partially prepared for the reception of patients. Only one wing of the building is finished. It was originally designed to have two wings, in order to separate the sexes, with a central executive building; but only one wing has been completed. This course seemed to be necessary to relieve the overburdened Asylum at Raleigh. So the difficulties to be encountered are many, and some of them very important, and will tax the Superintendent and his assistant to their utmost. We wish them every success, and believe

that the medical profession and the public will make proper allowances for the shortcomings of the administration if there be any.

DR. F. W. POTTER was unanimously elected Superintendent of Health of the County of New Hanover, in December, to fill the vacancy caused by the death of our lamented friend, Dr. Walker.

DR. GEORGE G. THOMAS has been appointed by the President of the State Board of Health, a member of the Quarantine Board of the Cape Fear River, to succeed Dr. Walker, deceased.

WHO SHALL BE THE EDITOR OF THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION?

Dr. Theophilus Parvin in a letter to the *Louisville Medical News* expresses his opinion as to the editor of the proposed Journal of the American Medical Association. He thinks that if the Journal is established in Chicago, that Dr. N. S. Davis, "one of the noblest and best of men" should be the editor. If Philadelphia be selected, Dr. John H. Packard who has done so much to give the work its present shape, would be an excellent choice.

"Nevertheless," he continues, it seems to me that Washington City is the most desirable place for publication, and Dr. John S. Billings is peculiarly fitted for the important and responsible position of editor of the Journal of the American Medical Association."

We concur in Dr. Parvin's views, upon the principle, that if you want an efficient worker, select one who is already full of business. There is no doubt about Dr. Billings' ability, and he alone could decide whether he could add this new task to the great work of the management of the National Medical Library.

A NEW PERCOLATOR.—Mr. Samuel J. Hinsdale, of Fayetteville, invented a percolator, which we find figured in *New Remedies* for January. It is intended by the inventor to be adapted to the percolation of tinctures, syrups, extracts, and other fluids, and to combine simplicity and cheapness of construction with durability and cleanliness.

REVIEWS AND BOOK NOTICES.

THE DISEASES OF THE LIVER, WITH AND WITHOUT JAUNDICE, WITH THE APPLICATION OF PHYSIOLOGICAL CHEMISTRY TO THEIR DIAGNOSIS AND TREATMENT. By GEORGE HARLEY, M.D., F.R.S. Illustrated by Colored Plates and Wood Engravings. Pp. 750. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1883. Price in cloth, \$5.50.

American publishers, during the last year, have given us several foreign works on the diseases of the liver, and still there is room for another.

We have read the volume before us with peculiar interest, and it will be read especially by Southern doctors, who, although they do not have a monopoly of diseases of the liver, by reason of semi-tropical malarial climate, encounter a large proportion of such diseases.

The arrangement of this work is unique. It opens with an introduction on the study of liver diseases, in which the value of physiological chemistry in their diagnosis and treatment is pointed out.

In the second chapter is discussed the chemistry, physics, and physiology of the liver, followed in the third by the etiology of the jaundice, and in the fourth by general remarks on the signs and symptoms of hepatic diseases.

General remarks on the treatment of hepatic diseases, cover seventy-four pages.

The contents of the succeeding chapters are as follows: Biliousness, Intrauterine, Congenital, and Hereditary Jaundice as a Result of Enervation, and Hepatic Congestion and Inflammation, and by Disease Germs; Biliary Concretions; Differential Diagnosis of Colic, Catarrhal Jaundice; Jaundice from Poisons, and from Permanent Obstruction; The Chemistry of the Excretions as an Aid to Diagnosis; Abscesses of the Liver; Cancer of the Liver; Syphilis of the Liver; Hydatid Forms of Hepatic Disease; Cystic Disease of the Liver; Benign Degeneration of Hepatic Parenchyma; Traumatic Affections of the Liver; Hepatic Ascites and Dropsy; Liver Spots; Affections of the Gall-Bladder; General Hints to Aid in the Diagnosis and Prognosis of Diseases of the Liver.

The diagnostic aids pointed out in determining the size and position of the liver are well considered. That this is no easy diagnostic feat, in many cases, all must admit. We are here reminded of the influence of sex,—the normal anatomical position in the corseted woman in the state of civilization, being from one to one and a half inches lower down in the right hypochondriac region, and nearly quite as much below the right nipple, than in a normally formed male. Also by reason of lax hepatic suspensory ligaments, the liver floats about in the abdominal cavity of some patients. The position of the liver varies, too, in the same individual at different times of the day for physiological reasons. A full stomach presses the liver downward and backward from the abdominal parietes; an empty stomach admits of the liver ascending upwards, and forwards, and with inspiration and expiration it rises and falls.

The area of hepatic dulness, we are informed usually commences at a spot two inches, in a direct line downwards, from the right nipple; and consequently the main calculations of the perpendicular extent of the anterior dull area of the organ are made in this line. Thus, in describing the normal extent of the anterior hepatic dulness in a person 5 feet 7 inches in height, the dulness is said to be four inches; which means the dull area which has been ascertained in the direct perpendicular right nipple line while the patient was lying in the dorsal recumbent position. Under the same circumstances again, in a person 5 feet high, $3\frac{1}{2}$ inches are usually put down as the standard of absolute dulness; while in one 6 feet or more, $3\frac{1}{2}$ inches are considered to be the full limit of dull area in the perpendicular right nipple line. In all persons be they big or little, the left margin of the dull hepatic area usually terminates at a point situated about $1\frac{1}{2}$ inches to the left of the lower margin of the xiphoid cartilage. This measurement is oftentimes a very uncertain one, in consequence of the presence of the generally distended and tympanitic stomach, the resonant tone from which sometimes completely masks the dull sound elicited from the thin margin of the liver. Fortunately in cases where it is most essential that the boundary should be ascertained the tissues are hardened and thickened, and the organ so enlarged as to elicit a distinctly dull sound.

In discussing the theory of jaundice the author enters upon his

subject with warmth. Taking as a text the statement of the theory of jaundice as propounded by Frerichs, Murchison and Legg, he proceeds to set forth his own views, in a clear and convincing manner. The authors referred to above, he says, have entirely laid aside the theory of jaundice as a result of suppressed secretion, and have introduced two entirely new elements—namely, abnormal diffusion and diminished consumption, the latter theory, of course, founded on the supposition that bile, after playing its part in the digestive process, is reabsorbed into the circulation, again to perform some other function in the animal economy, before its final excretion from the organism as effete matter. Prof. Harley supports the view first enunciated by Dr. Budd, viz: that the disease may arise in two ways—firstly, by a mechanical absorption to the passage of bile into the intestines, and the consequent reabsorption of the retained bile into the blood; and secondly, by a suppression of the biliary secretion arising from some morbid condition of the liver itself, whereby the biliary ingredients, from not being eliminated, accumulate in the circulation and stain the skin.

The theory of jaundice by obstruction of the orifice of the common bile-duct, is beautifully shown in a chromo-lithographic illustration of a specimen taken from the body of a patient under Dr. Harley's care during his life-time.

Notwithstanding the space given to a consideration of questions, not quite suited to the practical American doctor such as the pernicious qualities of champagne, *sec*, we believe this volume will be the favorite for many years to come. The concluding chapter alone on "Hints to Aid in the Diagnosis and Prognosis of Diseases of the Liver" is admirable.

We most heartily commend this book to our readers as a valuable addition to the working volumes of their libraries; for without any exception it is the most entertaining and instructive volume we had the pleasure of reading for many years.

A TREATISE ON FRACTURES. By LEWIS A. STIMSON, B.A., M.D., Professor of Surgical Pathology in the Medical Faculty of the University of New York; Attending Surgeon to the Bellevue and the Presbyterian Hospitals, New York; Member of the New York Surgical Society. 360 Illustrations on Wood. Pp. 598. Philadelphia: Henry C. Lea's Son & Co. 1883.

We lay Prof. Stimson's book on the table, after reading it, with two sets of feelings. One of regret, that he did not write more and continue to teach us. Another of wonder that he has gotten so much information into so short a space. Five hundred pages are a good many to devote to the one subject of Fractures, but not too many, as the book shows.

As a book must be judged by an analysis of its contents and not by the author's reputation or the reviewer's opinion, it will not be out of place to notice a few of its more prominent features.

Chapter VII treats of the "Complications and Remote Consequences of Fractures." Much dispute has arisen among surgeons as to what causes the stiffness observed in contiguous joints not directly involved in a fracture. Post mortem examination, or one after amputation has frequently shown signs of inflammation of the joint, injection and thickening of the capsule, softening of the cartilage and, in some cases, recently formed intra-articular bands. Gasselin and Berger, in 1878, claimed that this arthritis is due to the passage into the joint of extravasated blood coming from the fracture. Their colleagues in the "Société de Chirurgie" thought this opinion much too exclusive, though it might possibly be correct in some cases. "The arthritis, which is especially common in the knee after fracture of the leg or thigh, presents two clinical forms; in one it occurs immediately after the injury, in the other only after the lapse of a few days. The first is undoubtedly due in some cases to an associated sprain, in others possibly to the causes ascribed by Gasselin and Berger; the second is the result of the extension employed to overcome or prevent shortening." "It has been observed in the very numerous osteotomies that have been recently done for the relief of genu valgum, that after division of the femur above the condyles the patients are usually able to move the knee freely as soon as the splint is removed." In the author's opinion, this fact indicates that the stiffness observed after accidental fracture is

probably due in great part to an arthritis excited by a concomitant sprain. Fat embolism has come into prominence, as an occasional cause of death after fracture, during the past twenty years. Busch and Wagner, in 1865 and 1866, published observations which established the causal relations between fat embolism and early death after fracture. The author thinks it probable that fat embolism occurs to a certain extent after all fractures, but that it is not necessarily dangerous. It is dangerous in the old and alcoholic, whose hearts are weak and less able to force the fat through the capillaries, and their organs are less able to withstand the altered state of nutrition caused by the emboli. On this ground some writers have suggested a relation between fat emboli and the deservedly dreaded hypostatic pneumonia, hitherto attributed to the prolonged decubitus, and also that delirium tremens or nervosum may be a secondary effect. But Wiener and Peabody (Pathologists to the New York Hospital) consider fat emboli as having no influence in producing secondary effects. Fractures may be followed by an exuberant and painful callus. While this pain may be due to an inflammatory process, there are cases in which it accompanies regular repair without any assignable cause, and yet may be so severe as to necessitate amputation. It may be caused as the author says, by injury to, or pressure upon, a nerve by the edge of a fragment or the callus, and cases have been reported in which a portion of a nerve had been included in the callus and strangulated. This condition is very likely to produce paralysis if the nerve lies close to the bone at or near the seat of fracture, as in the case reported by Ollier (an illustration of which is given) in which the musculo-spiral nerve was included in the callus after fracture of the shaft of the humerus. The general treatment of fractures is discussed in Chapter VIII. "The aim of treatment is to secure prompt and firm union with the minimum of deformity and disability." The author recommends the use of an anæsthetic to overcome muscular resistance, when this interferes with the proper reduction of the displacement. With an anæsthetic a fracture can be set and dressed with more ease, and more prospect for a good result, both to patient and surgeon. There is one and only one objection to ether as an anæsthetic in reducing and setting a fracture (apart from constitutional contra-indication) and that is the violent move-

ments common during the stage of excitement. Broca overcame a violent spasm, in a case of fracture of the leg, by compressing the femoral artery for a few moments. This method is worth trying in any fracture of a limb, where the spasm is severe and interferes with the reduction or gives much pain.

As regards dressing and bandaging a fractured limb, the author says : "except under rare conditions when its use is clearly indicated, as in hæmorrhage, a roller bandage should not be applied to the broken or upper portion of the limb under the splints. * * * If it is feared that the principal vessels or nerves have been injured by the accident, it is often best not to attempt complete reduction and retention at first, but merely to support the limb in a good position until the full extent of the injury shall have become apparent. In many litigations the question upon which the verdict depended has been whether the gangrene was due to the original injury or to an ill-applied dressing, and the surgeon should protect himself as far as possible against the doubt. Of the various splints, fracture boxes, cushions, gutters, swings, suspensions, cradles *et id omne genus*, there is scarcely an end, and the great difficulty is to make a choice if you live in a city, or to get anything at all if you are a "country member." A very clear account is given of the manner in which the "Plaster-of-Paris Dressing," should be applied. Von Langenbeck has recently recommended tripolith as a substitute for plaster-of-Paris. The composition of it is secret and the author does not know if it can be obtained in this country. He claims the following advantages for plaster over other immovable dressings, except tripolith which he has not tried : 1st. It hardens so rapidly that the reduction can be easily maintained for the necessary length of time without the aid of splints ; 2d. It is, on the whole, more solid, and therefore better able to prevent subsequent displacement ; 3d. It is sufficiently porous to allow some ventilation of the limb ; 4th. It is simple and cheap. Its disadvantages are its weight, destructibility by water, and the impossibility of removing it temporarily. Though some surgeons use it in all cases of simple fracture of the thigh from the very beginning. Prof. Stimson generally postpones its use in the cases until after the third or fourth week, when the partial consolidation of the callus aids to prevent shortening. (A good way to remove plaster dressings, as

recommended by our confrère of the *Nashville Journal of Medicine*, is to apply strong nitric acid along the line intended to be opened. The plaster is rapidly softened so as to be cut through.) The treatment of fractures by continuous extension seems to be coming more into use every year, and very many improvements have been made in the past twenty-five years. The principle is to tire out the muscles whose contraction causes displacement, by a continuous and moderate strain upon them lasting for weeks. As to the advisability of communicating motion to fractured joints, surgeons are divided in their opinions, some preferring to maintain absolute immobility until consolidation is complete, others communicating motion at regular and short intervals after consolidation is well begun, while still others use from the first dressings that support without immobilizing. The weight of authority seems to be in favor of immobility. In many cases the movements are so painful that the patient will not submit to them. The author cautions us against the use of the ice-bag without carefully watching it. There is great risk of local sloughing, and of retarding the repair of the fracture.

For the treatment of compound fractures with wounds so large that primary union cannot be hoped for, the author unhesitatingly places the Lister method first, with Markoe's "through drainage" method next. He does not think that a spray is absolutely essential to the success of the antiseptic method. Irrigation may be used at the first dressing, and in subsequent ones a hand spray or a sponge saturated with carbolic acid solution squeezed over the wound and the mouth of the tube, or a strip of muslin wet with the same solution laid over them. Markoe's "through drainage" is based upon the theory that the benefits derived from carbolic acid are due as much to its topical action upon the tissues as to its power of preventing decomposition. An account of this method, from the pen of Prof. Markoe, may be found in the *Amer. Jour. Med. Sciences*, April, 1880. As to the indications for immediate amputation after compound fractures the author says: "Immediate amputation after compound fracture is indicated when there exist in addition injuries to the main blood-vessels which make the preservation of the limb impossible, or to the nerves which would render it useless to the soft parts so extensive, or in such positions

that the cicatrix would create a disability greater than that of the loss of the limb, or when the bone is literally smashed over a great extent and the neighboring joints are involved." As is well-known, scores of limbs are saved to-day by the recent antiseptic methods which would have been amputated immediately ten years ago.

In the diagnosis of fracture of the internal condyle of the humerus it is important to remember a fact pointed out by Markoe as long ago as 1855, that with this injury there may be associated dislocation of the radius backward; that is, displacement backward of the radius, ulna and fragment, these three pieces preserving their relations to each other, which may lead to disastrous consequences if not recognized and corrected. Dr. Allis thinks that this fracture should be treated with the arm in the extended position, and prefers a moulded splint or immovable dressing. It should be remembered in dressing this fracture that the uninjured limb is not straight when supinated, but there is an obtuse angle on the radial side of the elbow. The patient should be placed on the back, the sound arm stripped and the obtuse angle maintained during the dressing at the injured joint. The author does not think very favorably of passive motion at this joint to prevent stiffness. Where this injury is complicated by dislocation of both bones of the forearm backward, it may be necessary to flex the joint to a right angle or even further, in order to prevent recurrence of the dislocation.

In the much disputed question of bony union after intra-capsular fracture of the hip-joint, Prof. Stimson seems to side with the affirmative, and says that whether the union is fibrous or bony, there is really firm union in some cases, and we are not justified in neglecting to treat the case.

With regard to the diagnosis between intra- and extra-capsular fracture of the neck of the femur, he says that in many cases it is simply impossible to distinguish between the two, and in this he is supported by as high authorities as Gosselin, Agnew, Bryant and Hamilton.

It would be impossible to give any general analysis of the book in a short notice. It would not be a departure from the truth to say that this a great book. The letter press and binding are in the usual good taste of the publishers.

W. M. G. E.

LEGAL MEDICINE. By CHARLES MEYMOTT TIDY, M.D., F.C.S. Volumes I and II. Pp. 314 and 298. With Illustrations. Wm. Wood & Company, 56 and 58 La Fayette Place. 1882.

The arrangement of these volumes is so different from those of Taylor and Ogston, that at first sight the reader familiar with the older treatises may not be willing to accord them a place on an equality with the others. A careful perusal will show that they are valuable additions to our knowledge of forensic medicine.

The introductory chapter is the substance of a lecture delivered at London Hospital Medical College, setting forth the responsible nature of the study of legal medicine, and describing the process of law at coroner's inquest, the nature of evidence, the responsibilities and privileges of the medical man in the witness-box. This last named section, calls to mind the rights of medical witnesses in withholding professional secrets. The law of New York, we are informed, protects the medical witness from disclosing any information which he may have acquired in attending any patient in his professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon. In England and all the other States of the Union, we believe that a physician can be made to disclose his professional secrets. "This is the law," Dr. Tidy remarks, "and however it may be defended on legal grounds, we hope there are not a few medical men who would prefer to sacrifice their personal liberty to their honor. It seems a monstrous thing to require the secrets affecting the honor of families, and perhaps confided to the medical adviser in a moment of weakness, should be dragged into the garish light of a law court, there to be discussed and made joke of by rude tongues and unsympathetic hearts."

Returning to the arrangement of these volumes we find a most carefully written chapter on the "Signs of Death," a subject which has been discussed from time immemorial, and still requires more careful treatment. Nearly sixty pages are devoted to this subject, and the reader will find information to serve him in those perplexing times, when worrisome lawyers expect an opinion on call, upon matters of the gravest importance. This chapter is abundantly fortified by seventy-three illustrative cases, and this way of elucidating the text is followed after each chapter.

The difficult and important question of personal identity includes a very large number of items of enquiry, and must serve to facilitate the labors of the medical witness.

Toxicology is not treated in these volumes, but will be considered in those to follow. They must hold a high place in legal medicine; the citation of cases alone, making them altogether the most helpful works on the subject we have examined.

A GUIDE TO THE PRACTICAL EXAMINATION OF URINE. For the Use of Physicians and Students. By JAMES TYSON, M.D. Fourth Edition. Revised and Corrected. With Colored Plates and Wood Engravings. Philadelphia: P. Blakiston, Son & Co., No. 1012 Walnut Street. 1883. Pp. 196.

As edition after edition of this handsome manual passes through the press, it develops in value, and we can safely say of it that it is the most useful of the numerous treatises on the subject. No physician can use this volume as a clinical help in diagnosis without learning to regard it as a necessary part of his outfit.

ELECTRICITY IN MEDICINE AND SURGERY. By GEORGE C. PITZER, M.D. First Edition. St. Louis, Mo. 1883. Pp. 83.

"The object of this work is to furnish to the medical student with a book containing the principal facts embraced by the subject of electricity and [electro-therapeutics],"—says the editor in his preface.

The volume is well printed, and gives a goodly number of illustrations of the electrical instruments for sale by different firms. From the care taken to describe the parts of the apparatus employed, the author recognizes the necessity of elementary teaching on the subject of electricity. Most physicians underestimate the value of electricity [as] a curative agent, and every effort to give it a proper place in medicine should be properly appreciated. But the chief obstacle to the advance of electrical therapeutics is the crudity of the present state of knowledge, and the expensive outfit of apparatus. Therefore there are two opposite classes of medical men who employ these agents largely: the established specialist who can afford an outfit for occasional use, and the electrical doctor who cures everything with this one agent, and whose stock in trade is

his handsome equipment of nickel-plated batteries. This little volume, we hope, may excite a spirit of enquiry among the students for whom it was written.

RHEUMATISM, GOUT, AND SOME ALLIED DISORDERS. By MORRIS LONGSTRETH, M.D. New York : William Wood & Co., 56 and 58 La Fayette Place. 1882.

This is a well written monograph, particularly valuable for its historical and pathological descriptions. The whole subject has been lucidly set forth, and for the more studious of the profession who are not too busy to read monographs, it will be highly valued.

The publishers have printed this volume in double-leaded lines, with clear type and on good paper, enhancing the pleasure of its perusal.

SUICIDES IN NEW YORK CITY during eleven years Ending December 1880, showing the age, sex, color, nativity, means used for self-destruction, and the season of year when committed; together with a comparison of the deaths by Suicide in 247 American and Foreign cities, in the year 1800, obtained from official sources, and the proportion of suicides to the population of New York city from the year 1804 to 1880, inclusive. By John T. Nagle, M.D., New York. Reprint from Transactions American Public Health Association, 1881.

This is a well prepared statistical feast which few of us are constituted so as to enjoy it. Dr. Nagle deserves our thanks for putting this material in an acceptable shape.

THE VALUE OF GRADUATED PRESSURE in the Treatment of Diseases of the Vagina, Uterus. and Ovaries and other Appendages. By NATHAN BOZEMAN, M.D.

This is a controversial pamphlet, intended to show that Dr. Boze-man was original in his application of cotton wool pressure of the vagina in treating diseases of the uterus and appendages. If these discussions can be conducted fair and in a kindly and courteous manner they always bring out facts, but acrimonious debate is disreputable and encumbers the progress of medicine, and the pages of medical journals for which there is a better use.

No one who knows Dr. Bozeman can doubt the reliability of his statements, and no one who knows the difficulty of determining questions of originality, will care to become a partisan to either side of the controversy—Life is too short.

SMALL-POX IN NORTH CAROLINA.

Small-pox appeared in Wilson the latter part of December. There were three cases, but the disease did not extend beyond.

In January, small-pox was discovered in Trenton, imported from Cincinnati. There was only one case.

At Warm Springs, during this month, a case of small-pox was brought from Knoxville, Tenn.

Vaccination has been vigorously pursued, and we do not look for an epidemic. It is almost certain though that new cases will arise, and the greatest diligence is required to keep it out of our territory.

LACTOPEPTINE is a most convenient preparation of well-known digestive agents, as commonly prescribed as the old "Pulvis Sorbens" and much more effective in similar complaints.

CONFIRMATION OF SCHWEINITZIAN DESCRIPTIONS OF MICROSCOPIC FUNGI.—J. C. Arthur, of Ames, Iowa, (*Am. Naturalist*, January, 1883,) discusses what appears to be inconsistencies of the descriptions by Dr. L. D. von Schweinitz (formerly of Salem in this State,) contained in his works "*Synopsis of Carolina Fungi*," (1822) and in his "*Synopsis of North American Fungi*," (1832). The apparent inaccuracy was illustrated by the example of the species of (transparent) *Pucciniæ*. It occurred to Mr. Arthur that he might reconcile the differences by employing a microscope of the same power as those then in use (about 75 diameters) instead of the higher power 350 diameters. The descriptions of Dr. von Schweinitz were then easily confirmed. This may only interest fungologists, but it is also a lesson in the caution necessary in criticizing scientific work of a half century ago.

CURRENT LITERATURE.

CINNAMON AS A UTERINE HÆMOSTATIC.

Since the correspondence of J. R. L., in our Nov. issue, on the use of cinnamon in the arrest of uterine hæmorrhage, we have had further experience, tending to substantiate what our correspondent has written.

The circumstances are these :

A multipara had uterine hæmorrhage during four months succeeding her seventh labor.

Examination revealed a subinvolved uterus, with a deeply lacerated cervix. The woman was anæmic and feeble from great loss of blood.

The line of treatment adopted was after the usual course—rest with the exhibition of ergot, gallic acid and other medicines by the mouth, and styptic tampons into the vagina. All these failed.

A decoction of powdered cinnamon was given over night and an examination made the next morning in the genu-pectoral position. As soon as the beak of a Sims' speculum was put in place, a copious hæmorrhage followed. A solution of (3 i to ʒ jv) persulphate iron was then injected rapidly into the cavity of the uterus, and the altered blood came away slowly in a stream of about the consistency of soft mush. The uterus was then wiped out with a pledget of cotton wet with iodized phenol (Battey's). These failing and the hæmorrhage returning the patient was put to bed and a decoction of cinnamon (1 oz. to 1 pint of water) was administered; and under its influence the hæmorrhage ceased. Large clots were expelled the first 24 hours, but subsequently there has been no return of the hæmorrhage.

While this subject requires more extended trial, we do not believe it is premature to claim for cinnamon, for the arrest of uterine hæmorrhage, a place of more importance than that of ergot, gallic acid, or any other reputed hæmostatic. We hereby restore an old drug to a position long ago claimed for it and learn the lesson which the best therapists should not be above learning—not to despise a remedy because it is commonplace and has only the recommendation of the old women.

BONE-SETTING.

Mr. R. Dacre Fox, in a paper read before the British Medical Association, at Worcester, in 1882, calls the attention of the profession to some important points as regards Bone-Setters. He says, "nothing has done more to lower the prestige of regular practitioners, and to play into the hands of unqualified bone-setters, than the way in which so many practitioners tamper with a sprained joint." * * "The surface of a sprained foot is generally cold, and more or less edematous, and each joint has one particular spot in which pressure causes acute pain; the bone-setters have learned by experience the situation of these spots, and this fact has done more than anything to strengthen the popular faith in their intuitive skill; they certainly form an important guide to treatment since they indicate the seat of the greatest injury to the ligaments, and point out where their power of passive resistance has been most severely tested, and where adhesions are most likely to have formed. Dr. Hood has indicated some of these points: 1. Over the head of the femur in the centre of the groin, corresponding to the ileo-femoral bond of the capsular ligament. 2. For the knee joint at the back of the lower edge of the internal condyle—in other words, at the posterior border of the internal lateral ligament where it blends with Winslow's ligament, and where the semi-membranous tendon is in intimate relation with it. 3. For the shoulder at the point corresponding to the bicipital groove, because in nine cases out of ten a man sprains his shoulder to prevent himself from falling, his hands grasp the nearest support, the body is violently abducted from the arm, the long head of the biceps is called upon to exert its utmost restraining power, the bicipital fascia is over-stretched and the tendon very often displaced. 4. For the elbow the painful place is at the front of the tip of the internal condyle. On the front of the external malleolus, at the apex of the plantar arch, the tip of the fifth metatarsal bone, the styloid process of the ulna, the inside of the thumb, and the annular ligament in front of the wrist, are respectively the most painful spots when these joints are severally sprained."

VOIGT'S EXPERIMENTS IN THE TRANSMUTATION OF VARIOLA.

We considered the matter of sufficient importance to present a complete translation of Dr. Bernhardt Voigt's account of his experiments in the transmutation of variola into vaccinia, from the *Deutsche Vierteljahrsschrift für öffentliche Gesundheitspflege* (Drittes Heft. Braunschweig. 1882.)

Our readers may judge for themselves whether or not the conclusions drawn by Dr. Voigt are satisfactory. He has described circumstantially and minutely his experiments propagating upon the bodies of twenty-four heifers, small-pox virus from the human subject, and finally of transmitting this virus into a harmless virus, bearing all the appearances, and responding to the test for vaccine. Dr. Voigt's position as a public vaccinator, and his ability to command the material for his experiments, makes his work worthy of a patient hearing. More than this, the reiteration of the demonstration of the conversion of small-pox into cow-pox, has put the whole matter in such a light, that it behooves the American profession to undertake a like series of experiments, to corroborate or refute the report.

The work of individual experimenters can no longer be taken as a finality, but a commission of competent men should undertake it. One would not usually look to the American Medical Association to undertake the investigation, and supply the necessary funds, but judging from the way such things have been neglected, there is not much to be expected in this direction. If the American Medical Association could be induced to undertake the investigation, Dr. Martin, of Boston, has generously offered the Martin Vaccine Stables and stock sufficient to carry on the experiments.

We have conferred with several gentlemen of distinction in connection with the suggestion, and they have recognized the importance of taking active steps to induce some institution having the means at its command, to enter upon the investigation.

We are informed that the proprietors of several vaccine stables have been solicited to allow experiments in variolation to be carried on in them, but the record of individual work, so far, in this and other countries, has not been conclusive. It is a complex thing to pursue a study in animal inoculations, and only a commission of well prepared men, could be able to satisfy the medical world.

PROGRESS OF MEDICINE.

ASTHMA CIGARETTES.—Impregnate well nitred paper with an alcoholic fluid extract of grindelia ; let dry and use in cigarettes. Owing to the nitre they will continue to glow and develop.—*Medical Record.*

GELSEMIUM IN TETANUS.—Successful cases of tetanus have been recently reported from American and English sources. Theoretically we would expect good results, and now that practical experience bears out the theory we trust the remedy may not be overlooked in the future. We have had experience in only one case, so far, and death resulted.

NEW TREATMENT FOR PARAPHIMOSIS.—Dr. O'Conner in the *British Med. Journal*, January 6th, gives the following: Ordinary twine is wound round the constricted portion firmly and closely from before backwards, thus driving the exudation backwards. On removing the twine the paraphimosis is overcome.

KOCH'S BACILLUS TUBERCULÆ.—In the last number (January) of the *Chicago Med. Jour. and Examiner*, Dr. H. D. Schmidt, of New Orleans, gives a graphic illustrated account of what he takes to be Koch's bacillus, showing that it is really a fat crystal. The criticisms in the *Philadelphia Med. Times* and *Med. News* point out that what Dr. Schmidt figures is really a fat crystal and not a true bacillus. The true and pseudo-bacillus are distinguished from each other, from the fact that the pseudo-crystal polarizes under light, the true bacillus does not. The demonstrations of this inaccuracy were made by Dr. J. Gibbons Hunt, and can be certainly relied on.

WILL SHEEP LAUREL (KALMIA ANGUSTIFOLIA) KILL SHEEP.—This is not strictly a medical question, but we call attention to some recent experiments instituted to determine a statement as old as the Virginia botanist, John Clayton, (16—). A sheep was domesticated and confined in a stall and bedded upon sheep laurel ; did not appear to eat the leaves. He was then fasted for a few days, and still refused it. He was then offered the leaves intimately

mixed with hay, but only eat the hay. Subsequently he was drenched with a decoction representing a pound of the leaves. A few ounces caused vomiting, and finally the last, caused staggering and narcosis. The animal recovered after several days of sickness. The conclusions are as follows: 1. A sheep will not voluntarily eat kalmia if other food is at hand. 2. A hungry sheep will not eat it when intimately mixed with his food. 3. A small quantity of the plant will cause vomiting; a large quantity produces serious cerebro-spinal poisoning.

It is fair to infer that none but an animal with a very morbid appetite would eat the plant, and a very small dose would soon nauseate him, causing him to stop short of a fatal dose. The February number of the *Amer. Agriculturist* will have a full account of it.

OIL OF TURPENTINE.—We know that the oil of turpentine, exposed to the air, absorbs rapidly large quantities of oxygen. Schönbein thought oxygen, in acting on this oil, acquires the properties of ozone; but Berthelot showed that this was not so. Before it is definitively fixed, the oxygen forms with the oil a very unstable compound which yields easily to certain organic matters which it oxidizes, then the oil returns to its primitive state, can oxidize anew on contact with the air, yields its oxygen for new oxidations and so to drying, or better, total resinification. It forms also oxidations which free oxygen cannot produce. We conceive, then, that the oil of turpentine, which is in itself an antiseptic, can become much more so reduced to vapor, as it then presents a very much increased surface. It is by its great oxidizing power that it can destroy the germs or microbes floating in the atmosphere. Nearly all the natural oils, oils of gum resins, of the liabates, and laurels, etc., contains larger or smaller quantities of carbon compounds isomeric with the oil of turpentine. All of these oils resinify in the air like the oil of turpentine, but the less intense the degree of oxydability, I think we can claim for it the less antiseptic property.

THE PHARMACOPEIA OF 1880.—As a whole, it must first be said—and can hardly be said with too much emphasis—that it seems to be by far the best Pharmacopœia of the time, and this because it is the result of more labor and research than any other;

and this by hands as skillful as those of any other. In its general complexion and tone it is pharmaceutical rather than therapeutical. That is, while its general tendency and tone is to both polypharmacy and polytherapy, its greatest redundancy is in its pharmacy; and this is not at all to be wondered at from the constitution of the Committee of Revision, and from the fact that the pharmacists did almost all the work. While the committee was divided equally as a committee of twenty five could be, being composed of thirteen pharmacists and twelve physicians, yet of the physicians in it who were actively engaged in the practice of medicine, or ever had been prominent as therapeutists, the number was small. On the other hand, most of the pharmacists were not only active and able, but were prominent leaders in their branch of the art of medicine. But the prevailing drift of the time seems to be for the medical profession to turn over its most valuable and most important practical interest to pharmacy, and that pharmacy as a trade takes no more advantage of this unsafe and unwise drift, is highly creditable to the leaders of that branch of medicine. That twenty-five men could be found of such ability, who could and would devote so much individual time and labor and skill to such a work; and that one of the twenty five could be selected as chairman who would harmonize so much individuality with such tact and skill, and at the expense of so much clerical labor, is, to say the least, very fortunate for all the interests involved and very remarkable. While the whole nation is indebted to this committee for this successful work, the committee owes a very large proportion of the success to its chairman.—*Squibb's Ephemeris*.

THE STRENGTH OF OPIUM PRESSURE—The last Convention for Revising the Pharmacopœia expressly authorized the Committee of Revision to make all the liquid opium preparations of the strength of ten per cent. (of opium), if such change appeared advisable to the Committee. Tincture of opium, when prepared by the formula of the Pharmacopœia of 1870, represented 1 grain of powdered opium in 12.8 minims, or, taking into consideration the average specific gravity of the tincture, 100 parts of it represented about 9 parts of *powdered* opium. The new Pharmacopœia having adopted the strength of 10 per cent. it will be seen that, so far as

the proportion of *powdered opium* is concerned, the new tincture is slightly stronger. Now, as regards the strength of the powdered opium itself, it will be remembered that the last Pharmacopœia recognized powdered opium of only 10 per cent. morphine. Yet it is scarcely probable that such a powdered opium ever was in the hands of any pharmacist (unless it was adulterated), since the Custom-house would not permit any *crude* opium containing less than 9 per cent. of morphine to enter the country, and, reckoning the moisture in the latter as only 17 per cent. the poorest opium allowed to come in contained already nearer 11 per cent. (10.8) of morphine. It has long been known that this country has demanded and received the best grades of opium which the market afforded, and the average strength of the opium imported for years past has far exceeded the standard set by the Pharmacopœia. In fact, it is upon the experience of what has been imported, and upon the statistics of manufacturers who have kept careful record of the quality of their opium, that the Committee of Revision adopted for the powdered opium of the new Pharmacopœia the strength of 12 to 16 per cent. of morphine. This strength, then, is not an elevation of the requirements, but a mere adoption of the average qualities existing in the market.

Now, any person who has heretofore made tincture of opium from the average *bona fide* powdered opium of the market will, by following the new Pharmacopœia, obtain a product but slightly stronger in morphine. Yet, it is well known that the majority of pharmacists did *not* follow the official directions, and prepared their tincture from the crude opium, but without allowing for the amount of water present. Therefore, if any pharmacist, who has followed this method, should now strictly follow the process of the new Pharmacopœia, his new product would differ greatly from his former. It may, however, be suspected that most of those who used crude opium before will continue to use it hereafter, so that, in the end, the product prepared by *these persons* will differ but slightly. This argument would have no justification—being based upon an action not authorized by the Pharmacopœia—if it were not the fact that a large number of pharmacists actually follow it. It has been the custom of some manufacturers, heretofore to adjust the strength of their laudanum so that each fluid ounce contained

four grains of morphine. If opium having only ten per cent. of morphine is used, a fluid ounce need not contain over 3.75 grains of morphine; and four grains correspond to an opium of 10.6 per cent. of morphine. We think it was a mistake to adopt this as a standard, since it is based upon the lowest limit—although it may be argued that it was the *safest* standard. Now that we have a powdered opium requiring twelve to sixteen per cent. of morphine, it might have been expected that some manufacturers would adjust their tincture again upon the lowest allowed limit, namely, twelve per cent. And we understand that some have already done so. Again, there are those who have adopted a slightly higher standard, so as to get six grains of morphine in a fluid ounce. After all, as long as the Pharmacopœia permits an oscillation of the morphine strength in powdered opium between twelve and sixteen per cent., it naturally follows that the same oscillation will have to be permitted in the tincture.

Briefly, it may be stated that the statement recently made, “that the new tincture of opium is fifty per cent. stronger than the former” is based on the assumption that only the lowest grade opium was used heretofore, and only the higher grade opium will be used hereafter. This assumption, we think, is fallacious. The new departure will not make a great deal of difference in the dose, after all, excepting in assayed tinctures, that is, those which are exactly adjusted and based on the above figures.

As to the wisdom of adopting a ten per cent. strength for the liquid opium preparations, excepting paregoric, there can be no doubt that a better time to do so could not be well chosen, since the large number of changes in the new Pharmacopœia will induce every pharmacist to consult the work carefully before executing a process, and his attention will be more quickly drawn to the new feature than if the change had been adopted at another period when but few alterations, perhaps, would have otherwise been made in the work.—*New Remedies.*

A few weeks since we called the attention of our readers to some vile compounds which are described in the Homœopathic Pharmacopœia recently published by Boericke & Tafel, of this city—the gonorrhine, leucorrhine, and other nasty filth put into the mouths

of dupes by crack brained practitioners of medicine. We did not, however, note one other fact, because we wanted to wait until a legal decision had stamped the fraud as fraud. The remaining portion of the Homœopathic Pharmacopœia was in great part stolen verbatim from the United States and National Dispensatories. After a very brief suit, the whole edition has been suppressed under the copyright laws. The publishers probably thought no educated regular physician would ever see their book, and that they would escape unwhipped of justice; but was there ever a more telling proof of the impudent fraudulence of the assumption of modern Homœopathy than the fact that for the guidance of its votaries the leading business firm devoted to such specialty should provide stolen extracts from recognized standard scientific therapeutic treatises?—*Philad. Med. Times.*

GELSEMIUM SEMPERVIRENS IN TETANUS.—Early in September, 1880, I was called to see a strong, healthy mulatto woman, twenty years old, who was suffering from well marked tetanic convulsions, caused by a broken bit of glass, on which she had trodden two days previously, and which was embedded in her heel.

I administered chloroform to enlarge the wound and search for the broken glass. It was impossible to anæsthetise her profoundly, and her foot was forcibly held by strong assistants while I made free incisions, but failed to find the fragment of glass. The wound was then filled with morphia, and a common poultice applied; and a cathartic was given, which acted promptly.

Knowing well the inefficiency of chloroform, chloral and opiates in tetanus, I determined to try the effect of the gelsemium sempervirens, because of its well known power of relaxing all voluntary muscles. I therefore ordered twenty minims of fluid extract of gelsemium every two hours, alternating with the same quantity of liquor potassæ at the same intervals. There was great difficulty in deglutition; but milk and soups were taken in small quantities frequently.

On the morning of the second day there was a slight improvement in the rigidity of the jaw, and the general spasms occurred only every three or four hours. But, as the day advanced, the jaw became more rigid, and there were violent and painful contractions

of the muscles on the front and back of the chest. The general spasms also became more frequent, and sometimes occurred during sleep.

The dose of gelsemium extract was then increased to forty minims every two hours. During the third day there was a marked improvement in both tonic and clonic spasms; the medicine was continued in forty-minim doses. By the close of the fourth day the rigidity of the jaws was almost entirely relieved, and the general spasms recurred at longer intervals, and with diminished violence. After this period the improvement was rapid and regular and the dose of gelsemium was reduced to twenty minims, at which it was continued till full convalescence. No remedy of any potency was used after the first six hours but the gelsemium, and there can hardly be a doubt that the cure was the result of its use. The extract was fresh from the laboratory of Tilden & Co., and was given for a week in amounts closely approximating half an ounce to an ounce every twenty-four hours; it produced no other sensible effect than that of controlling the spasms and arresting the disease. There was no dizziness, no dimness of sight, no double vision, and no prostration of strength, as I have seen in other patients with other diseases from much smaller doses of the same preparation.

So far as I am aware, this is the only instance, in the records of medicine, of the use of gelsemium in the treatment of tetanus, and the result here is certainly encouraging.

As the gelsemium exerts such powerful control over spasms of the voluntary muscles, I would advise its use in hydrophobia, and I would suggest that it be used hypodermically, whether in tetanus or in hydrophobia.—*John B. Read, M.D., in British Med. Jour.*

HYPODERMIC ADMINISTRATION OF CATHARTICS.—Dr. A. Hiller, of Berlin, (*Zeit. für Klin. Med.*, Band iv), has reviewed the experiments that have heretofore been made in the way of injecting into the subcutaneous connective tissue medicine intended to produce catharsis, and has at the same time somewhat extended the list. He has, for a number of years, upon merely theoretical grounds, expressed his belief in the possibility of producing such effects; and has maintained the opinion that it was only a question of time

when appropriate remedies would be found for this purpose. But the discovery of a suitable remedy has until now evaded all pharmaceutical research; and among all those that have been proposed, there is not one that answers all the requirements of a hypodermic cathartic remedy.

Aloin, which has been the most universally used in experiments of this kind, gives, according to the manner of administration, a varied action. Miller observed, after the injection of from 15 centigrammes to 2 decigrammes ($2\frac{1}{4}$ to 3 grains), a copious discharge in from four to six hours after administration. In a brief review of experiments by Kohn, not referred to by the author, aloin was administered subcutaneously, in the dose of three decigrammes, without producing catharsis.

The colocynthus purum prepared by Merck, of Darmstadt, a light greyish-yellow powder of a bitter taste, administered internally or subcutaneously in the dose of 5 to 10 milligrammes (.75 to 1.5 grain), produces watery stools with moderate tormina. A solution in alcohol, glycerine, and water, is the best adapted to hypodermic medication. The injection is very painful. There is also a resinoid substance called citrullin, extracted from the colocynthus fruit, insoluble in water, which, when taken internally in the dose of 5 milligrammes to 1 centigramme, or if administered hypodermically in the same dose, dissolved in equal parts of alcohol, water, and glycerine, will produce the desired effect; but it produces also severe pain, accompanied by œdema and redness of the skin. The action of colocynthus and citrullin is also manifested by the officinal extract of colocynthus. A dose of 15 milligrammes to 6 centigrammes injected under the skin, produces diarrhœic evacuations, but also pain and œdema.

The substances thus far named, together with a small quantity of fluid, produce diarrhœa in from a half to one hour.

Experiments with cathartic acid from senna show that this remedy, rather freely soluble in water, will produce catharsis if taken internally in the dose of two or three decigrammes dissolved in water and glycerine. Administered subcutaneously, it produces painful inflammation of the skin, with a tendency to the formation of sloughs. If, however, the solution be made alkaline, this effect is not produced; and furthermore, 1 decigramme will occasion opious evacuations in eight to twelve hours.

The extract of elaterium, as well as the pure elaterin, is too often ineffective, and frequently it is for other reasons inapplicable.

Leptandrin, a glucoside of leptandra virginiana, internally, in the dose of 5 decigrammes, gently stimulates peristalsis without producing diarrhœa.

Euonymin, the glucoside of euonymus atropurpurea, internally (1 to 2 decigrammes) acts mildly. In obstinate constipation, a dose of 3 decigrammes or more will be found effective.

Baptisin, a glucoside of baptisia tinctoria, has to be given internally in the dose of 3 or 4 decigrammes, to produce mild catharsis in four or six hours.

The three latter remedies have been for a number of years employed in America, and their therapeutical value has been well studied.—*London Med. Record.*

OIL OF PEPPERMINT IN ZONA.—Dr. Meredith writes (*Birmingham Med. Review*, June, 1882):—"I have found the oleum menthæ piperitæ more effective than any other form of anodyne application I have tried in allaying the neuralgic pains often piteously complained of in cases of herpes zoster. These distressing pains—worse in elderly people—are complained of often when the eruption has disappeared; but painting the affected parts over with oleum menthæ piperitæ nearly always affords speedy relief. I have painted the oil over the eruption when it was out in a fresh florid condition, and that with great relief to the patient. The value of this application, in pains of neuralgic character, deserves to be better known than it is."—*London Med. Record.*

ANÆSTHETIC ACTION OF CARBONIC ACID GAS.—Dr. Brown-Séquard (*Soc. de Biologie, Le Prog. Méd.* 1882, No. 45), having found that a stream of carbonic acid gas produced anæsthesia of the mucous membrane of the larynx, in further experiments found that a stream of gas, directed into the larynx of certain animals during a fit of epilepsy, stopped the fit, and a stream of gas thrown from below upwards on the trachea arrested respiration and put an end to the convulsions of strychnia poisoning. These results suggest that the action is not only local, but is upon the central nervous system. He proposes another experiment, in which part of the

mucous membrane will be covered with glycerine, so as to protect it from the direct action of the gas. If that part be anæsthetic, the central nature of the phenomenon will be demonstrated.—R. Saundby, M.D., in *London Med. Record*.

ACIDULATED SALT SOLUTION AS A TEST FOR ALBUMEN AND PEPTONE IN URINE —When an albuminous urine is treated with a saturated solution of common salt, not the slightest reaction takes place; but if the brine is slightly acidulated with hydrochloric acid, the albumen is thrown down as a dense white cloud. This reaction constitutes a most delicate test for albumen in the urine.

The best degree of acidulation for this purpose is obtained with about five per cent. of diluted hydrochloric acid of spec. gr. 1.052. A little more or a little less acid makes no appreciable difference in the sensitiveness of the test. Common salt dissolves in about two and a half times its weight of water at 60° F.; an increase of temperature does not sensibly increase its solubility. The salt of commerce is always more or less dirty, and the solution requires filtration to fit it for use as a test. The salt solution should be fully saturated, otherwise the observer is apt to be led into error. In preparing the test with common English measures, the readiest plan is to mix a fluid ounce of dilute hydrochloric acid with a pint of water, and to saturate this with common salt, and filter.

It is important to be aware that the precipitation of albumen by acidulated brine is not due to a true coagulation. In this respect the brine-test differs from the test with nitric acid and boiling.

It is well known that the urine of patients who are taking large doses of resinous substances (such as the resin of copaiba), although free from albumen, yields a cloudiness with nitric acid in the cold, but, if the urine be previously made hot, nitric acid produces no such reaction. This difference serves to distinguish cloudiness due to resin from cloudiness due to albumen. The brine test also produces a cloudiness in resinous urines, and the reaction occurs whether the urine be hot or cold. To avoid the fallacy thereby arising, all that is necessary is to add an excess of the urine which is being tested. If the cloudiness is due to albumen, it disappears on such addition, but, if it be due to resin, the cloudiness does not

disappear on the addition of more urine. One of the chief advantages of the salt test is its incorrosive character. It does not stain nor burn holes in garments or carpets, nor flock the hands with yellow spots. The use of it makes it possible to arrange a pocket-case for urine testing that shall not be a terror to the wearer.*

PUNCTURE FOR INTESTINAL OBSTRUCTION.—Mr. Worthington, in the *Brit. Med. Jour.*, July, 1882, p. 167, reports a case of a laborer, aged 28, who had had for some time attacks of constipation and vomiting, but on coming under treatment, was suffering from acute obstruction. The abdomen was enormously distended. The patient suffered from stercoraceous vomiting, and great pain about the umbilicus; no hernia was discovered. These symptoms gradually became worse for six days, during which opium was given, enemata administered, and fomentations, and, later, ice were applied to the abdomen. Mr. Worthington, as a preliminary to abdominal section, punctured the abdominal walls at a spot two and a half inches above, and one and a half to the left of, the umbilicus, with a medium-sized aspirating needle. A large quantity of flatus gradually escaped, followed by stercoraceous fluid; some gurgling was then noticed in the bowels. A few hours later, the patient passed wind, and two fluid stools. A week afterwards, it was discovered that he had a small direct inguinal hernia. He made a rapid recovery, and, on a truss being applied, he returned in his usual occupation.

BELLADONNA IN HERNIA.—In the *Brit. Med. Jour.*, July, 1882, p. 87, Mr. Batten records two cases of hernia treated by large doses of belladonna. The first was a man, aged 79, with an old inguinal hernia, who, a week before coming under treatment,

*I have carried about me for some months past a little pocket case (which is only a stiff-back cigar-case) which I have found a safe clinical companion. It contains a book of litmus papers, a narrow corked phial filled with acidulated brine, a test-tube charged with Cooper's pellets of the solid Fehling's test, guarded with an India rubber stopper, and lastly an empty test-tube also provided with a cork. This compact arrangement also furnishes the means of ascertaining the reaction of the urine, and of testing it in the most delicate manner for albumen and sugar. The empty tube also serves to carry home a specimen of the urine for further and more minute examination.—*Editor New Remedies.*

while doing some heavy work, felt the hernia suddenly give way. Ordinary means failed to reduce it, and the patient refused either to take chloroform or undergo an operation. He was ordered half-drachm doses of the tincture of belladonna every half hour; in three hours' time there were toxic effects, and the rupture passed up easily. The hernia came down again a fortnight afterwards; but, after taking three half-drachm doses, it was easily returned. The second was a youth aged 19, suffering from a hernia, which had existed since childhood. Taxis, in a hot bath, and under chloroform, being unsuccessful, forty minim doses of tincture of belladonna were given every hour; after four doses he fell asleep, and, after two hours more, the hernia was found returned. Mr. Batten concludes some remarks on these two cases with the observation that belladonna contracts the calibre of the congested vessels, and the non-striated muscular walls of the protruded gut, and thus render reduction into the abdominal cavity more easy.—*London Med. Record.*

INTRACTABLE VOMITING IN PREGNANCY.—Dr. Tepliashin (*St. Petersburg Med. Woch.*) recently attended a sickly anæmic woman, 25 years old, during her fifth pregnancy. In the third month, constant vomiting occurred, and caused serious exhaustion. Considerable abrasion of the external os was detected on examination; this was healed in a month by the application of solutions of sulphate of copper increased from 10 to 25 per cent. The vomiting, however, did not cease. The entire cervix and the os was then freely smeared with solid sulphate of copper; violent sickness followed for three days, then it ceased, the patient's appetite returned, and she rapidly regained health and strength.—*Alban Doran, in London Med. Record.*

MORTALITY OF WHITE AND BLACK TROOPS.—We learn from the *Med. Times and Gazette*, that according to the statistics of the Army Medical Department, that the black troops appear to suffer much more than the whites, even in tropical climates, which is their native element. In the West Indies command the mortality amongst the whites was $8\frac{1}{2}$ per thousand, among the blacks it was more than 19.

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Suicides in New York: During the Eleven Years Ending December 31, 1880, showing the Sex, Age, Color, Nativity, Means used for Self-Destruction, and the Season of the Year when Committed, &c., &c. By John T. Nagle, M.D., New York. Read before the American Public Health Association, at Savannah, Ga., Nov. 30, 1881. Reprinted from Volume vii Public Health Papers of the American Public Health Association. Cambridge: Printed at the Riverside Press. 1882.

Dr. Norris' Third Corpusele of the Blood. A Criticism and Refutation. By Mrs. Ernest Hart. Reprinted from the London Medical Record, October 15th, 1882. London: 1882.

Preliminary Report on the Yellow Fever Epidemic of 1882, in the State of Texas.

Monterey, Mexico. The Invalids Paradise, and Where to Go this Winter. Chicago: Poole Bros., Printers. 1882.

A Treatise on the Culture and Raising of Silk Worms. A Few Hints to the Farmers of the South. By L. S. Crozier. New Orleans: Printed at the Democrat Office.

Report of the North Carolina Institution for the Deaf and Dumb and the Blind, from January 1st, 1881 to January 1st, 1883. Raleigh: Ashe and Gatling, State Printers and Binders. Presses of Edwards, Broughton & Co. 1883.

Annual Report of the Board of Directors and the Superintendent of the North Carolina Insane Asylum for the Year Ending December 31st 1882. Raleigh, N. C. Ashe and Gatling, State Printers. Presses of Edwards, Broughton & Company. 1883.

The Relation of Schools to Diphtheria and to Similar Diseases. By Henry B. Baker, M.D., Secretary Michigan State Board of Health. Reprinted from the Sixth Volume of the Transactions of the American Public Health Association. Boston: Franklin Press: Rand, Avery & Company. 1881.

Restriction and Prevention of Diphtheria. Document issued by the State Board of Health of Michigan. Revised Edition of 1881.

Annual Report of the Supervising Surgeon-General of the Marine-Hospital Service of the United States, for the Fiscal Year 1882. Washington: Government Printing Office. 1882.

Fortieth Report to the Legislature of Massachusetts relating to the Registry and Return of Births, Marriages, and Deaths in the Commonwealth. For the Year Ending December 31, 1881. Prepared under the Direction of the Secretary of the Commonwealth. Boston: Wright & Potter Printing Company, State Printers, 18 Post Office Square. 1882.

Addresses delivered on the Occasion of the Dedication of Cooper Medical College Building. By Levi C. Lane, A.M., M.D., and by Edward R. Taylor. A. L. Bancroft & Co., Printers. San Francisco. 1882.

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Seventh Report of the State Board of Health of California, from July 1, 1880, to December 1, 1881. Sacramento: J. D. Young, Superintendent of State Printing. 1882.

The Early Diagnosis of Chronic Bright's Disease. By T. A. McBride, M.D., New York: Trow's Printing and Bookbinding Company, 201-213 East 12th Street. 1882.

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The Genius of Medicine. Annual Address Presented to the Florida Medical State Association. 1882. By Robert B. S. Hargis, M.D., Pensacola, Fla. Reprinted from the July No. (1882) of the New Orleans Medical and Surgical Journal. New Orleans: Times-Democrat Job Print, 58 Camp Street. 1882.

Contribution to Surgical Gynecology. By Edward W. Jenks, M.D., LL.D. Reprinted from the Transactions of the Illinois State Medical Society. Chicago: Charles J. Johnson, Printer, 138 and 140 Lake Street. 1882.

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Twelfth Annual Report of the City Registrar of Marriages, Births and Deaths in the city of Albany for the Municipal Year ending April 30, 1882. Albany: The Argus Company, Printers.

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Immigrant-Inspection Service in Michigan. June 1 to September 30, 1882. A Statement Prepared in the Office of the Secretary of the State Board of Health, in Part from Weekly Reports by the Inspectors at Port Huron and at Detroit. Reprinted from the Annual Report of the Michigan State Board of Health, for the year 1882.

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Artificial Feeding of Infants. A Clinical Lecture Delivered at the Pennsylvania Hospital, October 25, 1882. By Arthur V. Meigs, M.D., Physician to the Hospital. Reported by Charles Baum, M.D. Reprinted from the Medical News, November 4, 1882.

State Boards of Health, Their Object and Use, etc. Extracts showing the Views of Practical Workers and Eminent Sanitarians, Issued by Order of the Indiana State Board of Health. Thad. M. Stephens, M.D., Secretary and Executive Officer. Indianapolis: Wm. B. Burford, Printer, Lithographer and Binder. 1882.

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A Large Fibro-Cyst of the Uterus and Ovarian Cystoma, Co-existing with Pregnancy; Operation; Recovery. By Walter Coles, M.D., St. Louis. Reported to St. Louis Obstetrical and Gynecological Society, October 19, 1882.

A Treatise on Fractures. By Lewis A. Stimson, B.A., M.D. Professor of Surgical Pathology in the Medical Faculty of the University of New York; Attending Surgeon to the Baltimore and Presbyterian Hospitals, New York; Member of the New York Surgical Society. 360 illustrations on Wood. Philadelphia. Henry C. Lea's Son & Co. 1882.

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A Guide to the Practical Examination of Urine. For the Use of Physicians and Students. By James Tyson, M.D. Fourth Edition. Revised and Corrected. With Colored Plates and Wood Engravings. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street.

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ORIGINAL LECTURES.

CIRCUMSCRIBED EMPYEMA AT THE BASE OF THE
RIGHT CHEST AND AT THE APEX OF THE LEFT
CHEST—SUBACUTE INFLAMMATION OF THE LIVER
AND THE SPLEEN WITH GREAT ENLARGEMENT OF
THESE ORGANS.

A Clinical Lecture delivered at the Hospital of the University of
Pennsylvania, October 28th, 1882.

By WILLIAM PEPPER, M.D., LL D.,

Professor of Clinical Medicine in the University of Pennsylvania.

Reported by WM. H. MORRISON, M.D., for the NORTH CARO-
LINA MEDICAL JOURNAL.

GENTLEMEN :—This little boy was brought to me by his physi-
cian last Sunday, suffering horribly from dyspnœa. The history in
brief is as follows: He is about nine years old and one of a family
of four children. The parents are healthy. One brother died from
convulsions, apparently due to tubercular meningitis following

chronic lung trouble. One brother and a sister are living and healthy. There is no hereditary tendency to disease. For three years after birth he had eczema of the face and scalp. He has had several of the infectious diseases of childhood but has never had scarlet fever. He was always sensitive to cold and damp and took cold easily, and always, during the continuance of such attacks, suffered greatly from difficulty in breathing. Last February he had a severe attack of measles from which he is said to have recovered. About the middle of last June, he was attacked by sharp pain through the chest, accompanied by a hacking cough and expectoration of mucus. This continued for two weeks without much improvement. Diarrhœa then appeared and lasted two weeks. There were no cerebral symptoms and no reason to suspect typhoid fever. He was confined to bed for four weeks. After he got about again, although his appetite was good, he did not seem to gain strength; the hacking cough was troublesome and there was a little expectoration of tenacious mucus, which has continued. Four weeks ago his left hand became swollen. The œdema remained a few days, disappeared and again returned. It is now decidedly œdematous. The feet have been swollen for the past ten days or two weeks. Hectic fever and night sweats have been present for at least a month. There has been a continued loss of flesh and a steady increase of dyspnœa. A week ago the cough became loose and he expectorated considerable muco-purulent matter. Five weeks ago enlargement of the right side was noticed.

We have then the history of a long illness. If we were to base any opinion on the history, it would be that the child five months ago had an attack of pleurisy.

He was admitted to the hospital last Monday. On Tuesday when I again saw him, the dyspnœa was very great, he was gasping for breath, unable to lie down; the pulse was exceedingly small, rapid and feeble; the legs were œdematous, and the face was intensely anxious. Physical examination revealed some interesting and remarkable changes.

In the first place, there was marked bulging of the whole postero-inferior portion of the right thorax. This was not due to swelling, external to the ribs, for these could be plainly felt at all points. This enlargement was, therefore, intra-thoracic. There was dulness

on percussion over this region. The flatness extended from the spine to the line of the axilla and from the scapula downwards merging into the liver dulness. On auscultation no respiratory murmur was heard; vocal fremitus was absent. On careful palpation there was felt in the ninth interspace an indistinct sense of fluctuation, and when the child made strong efforts at breathing, it seemed as though the intercostal tissues were pressed out against the finger.

Continuing the examination of the chest, I found that the heart was displaced to the right and not to the left as might have been expected; it pulsed at the xiphoid cartilage and its sounds were best heard to the right of the sternum. The heart's impulse was not markedly perceptible at its normal situation. The anterior part of the right chest was extremely resonant, and the respiratory murmur was exaggerated (puerile).

The left side was, if anything, more prominent than the right and the ribs did not show as clearly. Percussion showed absolute flatness in front from the first rib down to the lower border of the fourth rib, and from the left edge of the sternum to the back part of the axilla; behind, the dulness extended from the apex, to the middle of the scapula. Over this region there is an absence of vesicular murmur and vocal resonance, and fremitus, but there is heard transmitted bronchial breathing.

The diagnosis of this case is somewhat embarrassing. The difficulty is to explain the character of these two centres of disease, one at the apex of the left lung and the other at the posterior base of the right lung. Either would have been sufficiently perplexing.

Let us first consider the lesion on the right side. There has been pain, hectic fever, night sweats, progressive loss of flesh and strength, and enlargement of the right side which is dull on percussion and the seat of no respiratory murmur, vocal fremitus, or resonance. The symptoms point to suppurative disease of some kind. If this had come on without fever, there would have been reason to suspect tumor of the liver or lower portion of the lung, but when we learned that there has been distinct fever, there was reason to hope that it was a suppurative disease with accumulation of pus. This might be due to abscess of the liver, to suppuration of a hydatid cyst of the liver, or to a circumscribed collection of pus in the pleural cavity, an empyema.

The absence of any cause which would lead to abscess of the liver, the absence of jaundice and the extreme rarity of the disease in this climate and especially in children led me to dismiss abscess of the liver.

So with hydatid cyst, which is exceedingly rare, and seldom undergoes suppurative change. It nearly always has to be opened, when a clear, non-albuminous liquid, escapes. It was improbable that the present case was of this nature.

Considering that the disease came on apparently as an attack of pleurisy and that the physical signs showed that the disease was intra-thoracic, it was very probable that it was a circumscribed empyema.

Consequently, as soon as he was brought to the hospital I punctured the chest in the ninth interspace in the line of the axilla and removed two pints of laudable pus, not offensive and containing no biliary matters. The operation was followed by immediate and marked relief.

Let us now study the effect of this upon his condition. Vesicular murmur and friction râles are now heard all over the posterior part of the right chest. Percussion shows resonance at all points, but there is still some impairment at the seat of greatest prominence. Although the relief has been so great, I do not expect a single puncture to cure. I expect the sac to refill. You remember that ten days ago he began to spit up a great deal of pus. It may be that there has been a perforation through the pulmonary pleura and that the pus is escaping in that way, thus preventing the reaccumulation in the sac; but if we had waited for the occurrence of spontaneous perforation, the child would have died before the pus could have been discharged.

As regards the character of the trouble at the left apex. The symptoms and physical signs point also to circumscribed pleurisy. There is flatness from the fourth rib, over the top of the lung, to the middle of the scapula behind. There is slight bulging of the intercostal spaces. There is absence of vesicular murmur, vocal fremitus and resonance. These are not signs of consolidation of the lung, but signs of a collection of fluid in the pleural cavity, pressing away the upper lobe of the lung. Of course when we consider the nature of the disease at the base of the right lung, the

probability is that this also is a circumscribed empyema. While it is very uncommon to have an empyema in this situation it is much more rare to meet with such a condition associated with a huge empyema of lower part of the chest.

I wish, to-day, to consider the propriety of aspirating this empyema at the left apex. I do not desire to puncture it and shall not if there is reason to believe that the pus will be discharged rapidly enough by expectoration.

Let us look at the position of the heart. We should have thought that the collection of pus at the base of the right chest would have pushed the heart more to the left than normal, but this was not the case. It was pushed to the right and pulsates beneath the sternum. The collection of fluid at the left apex has been sufficiently large to overcome the pressure from the right. I think that since the aspiration, the heart has gone back a little to the left. Having removed the pressure from the right side we should expect that, if the pressure from the left remained the same, the heart would be pushed still further towards the right. This would be the mechanical result, but instead we find the heart slowly returning to its natural position. This would seem to indicate that the pus was being removed from the left apex. The action of the heart is greatly improved, the pulse not being over 100 per minute.

Since yesterday morning, the left hand has been swelling. This indicates increased obstruction to the return of the blood from this member.

As his appetite is good, the pulse improved, the dyspnoea better, and as he is raising so much pus, I shall postpone the operation. I shall give him a few drops of tincture of digitalis three times a day to steady the heart, and shall bring him before you on another occasion.

SUBACUTE INFLAMMATION OF THE LIVER AND SPLEEN WITH GREAT ENLARGEMENT OF THESE ORGANS.

Our next patient, a boy of seventeen, came from Pittsburg a few days ago to see what could be done for him. We notice in the first place that he is small of stature, but not emaciated. He states that he never was much stouter than at present. In the next place, we notice that he is jaundiced, that the skin and conjunctivæ are quite

yellow. This has been constant for the past seven years. His father and mother are living and healthy. His brothers and sisters are all healthy. When five years old he had scarlet fever, which was followed by dropsy. He has also had typhoid fever. Six or seven years ago enlargement of the abdomen was noticed. This has continued and has gradually increased.

Before calling attention to the appearance of the abdomen I shall examine the urine of which I here show you a specimen. The specific gravity is 1002, yet it is higher colored than urine of normal specific gravity. If this were concentrated until its specific gravity was 1012, it would be very high colored. Heat and nitric acid show that there is no albumen present. There is no sugar. I believe the high color to be due to the presence of biliary coloring matters. He passes much more urine than he should. The exact amount has never been determined, but I shall have the quantity passed, per diem, measured. He states that he has to get up several times during the night.

Proceeding to examine the abdomen, we find that the enlargement is almost symmetrical. The lower part of the belly is soft, while the upper portion is resisting. The hepatic dulness begins at the fifth rib and extends to two inches below the margin of the ribs. The organ is slightly tender. The splenic dulness begins at its normal location and extends to the line of the umbilicus. It is fully eight inches in length. It extends to the right of the median line and joins with the liver dulness. We have then both the liver and spleen enormously enlarged. There is no pulsation and no murmurs at any part of the abdomen. There is no demonstrable fluid in the peritoneal cavity, and no œdema of the lower extremities.

Here then we have a case extraordinary in various respects, extraordinary in the obscurity of its cause, in the long continuance of its symptom, in the extreme gravity of the local lesions and in the mildness of the general symptoms.

What is the nature of this enlargement of the liver and spleen? It is difficult to give an adequate explanation of it. It is solid and firm. It is associated with jaundice and polyuria. There is no suspicion of inherited disease. The enlargement involves the whole of each organ. There are no masses springing from them. There is no fluctuation in either organ. The youth of the patient, the

complication of two organs and the preservation of general health render the idea a malignant disease inadmissible.

In certain cases of organic heart disease, where there is general venous obstruction, the blood is dammed back in the ascending cava, causing great congestion and enlargement of the liver and spleen. In such enlargement there is often jaundice and no very little breaking down of the general health. Examination of the heart, however, shows only a faint systolic murmur. There is slight dilatation of the veins. The heart's action is regular and the pulse is of good volume and eighty-four per minute. There is no evidence of general venous obstruction, no swelling of the feet, no œdema of the face. I wish you to observe that in grave obstructive cardiac disease, there is also congestion of the kidneys with scanty albuminous urine. The comparatively healthy state of the heart, the absence of pulmonary congestion, absence of general œdema and the absence of scanty albuminous urine show clearly that this condition cannot be attributed to the heart and cannot be dependent on prolonged venous congestion.

Albuminoid disease of these organs is not rarely met with in children, as a consequence of a scrofulous taint, old bone disease, long standing abscess, inherited specific taint and from other causes which it is sometimes difficult to discover. In this disease the organs become very large, retain their natural shape, and are the seat of but little tenderness. The general health may be well preserved. The kidneys, however, usually suffer and the symptoms which mark albuminoid disease of the kidneys are, polyuria, the urine containing albumen and frequently hyaline tube casts, and if the disease is severe, dropsy of the extremities is apt to be early and well marked. For a child of healthy parents, with healthy brothers and sisters, free as far as we can determine, from specific taint, with no expression of scrofula, who, for seven years, has presented evidence of affection of the liver and spleen with enlargement of these organs, whose general health is well preserved who has no albumen in the urine and no œdema of the limbs, to have albuminoid degeneration would be an extraordinary occurrence. I cannot accept this as a satisfactory explanation.

You will have already called to mind the class of cases which we considered a few weeks ago, the different varieties of anæmotosis.

Is not this a case of splenic leucæmia or pseudo-leucæmia? I have asked Dr. Wm. E. Hughes to calculate the number of blood corpuscles. He found 4,695,000 red, and 5,000 white globules to the cubic millimetre. The proportion of white to red being about 1 to 1,000 which is much lower than is usually stated in the text-books. In this connection, Dr. Hughes states that in a large number of observations made upon blood taken from healthy individuals, he has found the proportion of white to red much less than is usually stated. Dr. Sims has come to the same conclusion. There is, in the present instance, no increase in the number of the white globules, and no appreciable decrease in the number of the red. We may, therefore, exclude all varieties of anæmotosis.

At the last lecture I showed you a case of hypertrophic cirrhosis of the liver, where the organ had undergone a morbid change in which there was great increase in the amount of interstitial connective tissue and the deposition of a large amount of fat. Occasionally (and I have seen this more frequently in children than in adults) the liver is enlarged from subacute inflammatory hyperplasia, without so much fatty accumulation and without so much degeneration of the gland cells as you saw last week. This may affect the liver alone or the spleen may also be involved, although usually not to as great an extent. The causes of cirrhosis in children are obscure. I am inclined to refer them to subacute inflammatory action set up in the course of certain specific diseases. I have most frequently observed it following severe measles.

I have now passed in review before you the various conditions which might be suggested in explanation of this case. The most probable diagnosis is, I think, subacute inflammatory change in the liver and spleen with chronic congestion of these organs due to obstruction of the portal circulation. This has probably resulted from one of the specific fevers of childhood of which he has had several.

The important question is that of prognosis. Regarding it as a case of mere hyperplasia and in view of the favorable state of the general health, I see no reason why great improvement may not be effected. My prognosis would be guardedly favorable. Considerable time will, of course, be required to accomplish much good.

The treatment to which I should resort, would be strict regimen,

rest for the greater part of the day, graduated exercise, carefully avoiding exposure, critical attention to the state of the skin, a diet chiefly of liquids and avoiding those elements which require active hepatic digestion, giving largely albuminoid liquids, broths, skim milk and the like and the use of large doses of resolvents, in alternating courses of iodide of potassium freely diluted and chloride of ammonium. I should also use strong currents of electricity through the enlarged organs, possibly aiding its influence upon the contractility of the tissues by the interstitial injection of ergotin, although on account of the youth of the patient and the liability of producing abscess, this should be done cautiously. Ergot could be administered by the mouth with advantage. Massage, rubbing, stroking and patting the abdomen, would be of service.

This patient will probably return to the hospital, and we shall have an opportunity of watching his case.

February 3, this patient was again before the class at which time Dr. Pepper made the following remarks :

You have seen this lad on a previous occasion and as he is about to leave the hospital for his home in Pittsburg, I bring him before you to-day that you may see his present condition. We have thoroughly considered the diagnosis, and I shall therefore not refer to that but simply show you the results of treatment. On December 12th, he weighed 83½ pounds. He now weighs 89 pounds, a gain of six pounds in seven weeks. When you saw him last he was very much jaundiced, he is now a great deal whiter. While there is still a distinct amount of jaundice as shown by the conjunctivæ, the general surface of the body is much less icterode than it was seven weeks ago.

At the time he weighed 83 pounds. He measured 28 inches around the body on a level with the umbilicus. He now measures 26½ inches at this point. There has then been a reduction of the tympanitic distention of the lower part of the belly brought about by the improvement in digestion. When admitted the circumference of the body at the margin of the ribs, was 31 inches. It is now 29. There has been a reduction of two inches in spite of the fact that the boy is fatter than at that time.

Although he has been taking twelve grains of the chloride of ammonium, four times a day, the crisis of the blood has im-

proved. An enumeration of the number of the blood corpuscles by Dr. William E. Hughes, gives the following: 4,570,000 red globules and 35,000 white globules to the cubic millimetre. The red are nearly normal as to number; the normal being considered to be 5,000,000 to the cubic millimetre. The proportion of white to red is as 1 to 131 which according to this method of estimating is about the normal proportion.

The contour of the organs is still distinctly felt. Lately there has been felt over the convexity of the liver, a spot which seems to be rather more tender than the rest of the organ and which seems to be slightly raised above the surrounding surface of the liver as though it were a circumscribed lump. This particular spot is the only one which gives the ground for the slightest suspicion of there being any foreign growth about the liver and it is entirely too indistinct and vague to base a diagnosis upon. I merely call attention to it as a thing that we have observed, but unless it assumes greater proportions than at present, I shall attach no diagnostic importance to it. It may be merely a normal inequality in the contour of the liver. These exist in many cases.

The spleen still extends to the line of the umbilicus and measures six inches in a transverse direction. It is firm, not very tender and not the seat of any lumps. It is slightly movable and the hilus can be readily felt. The liver and spleen are still greatly enlarged but the present circumference of the body as compared with the same circumference taken several months ago, would indicate some reduction in the size of these organs.

On the whole, we can say that of late the boy has improved in the most satisfactory manner, and this improvement confirms the diagnosis which we made. There is but a single feature of organic disease; but if this enlargement were due to diffused sarcoma or anything of that kind, the organs would not have decreased in size and he certainly would not have gained six pounds of flesh in seven weeks, while upon a low diet and large amount of alkalies which are rather inclined to lessen the weight.

This improvement has been due to the absorbent and deobstruent effects of the chloride of ammonium, conjoined with a low diet, and I am not at all without hope that a long continuance of this treatment will result in a perfect cure.

CORRESPONDENCE.

HOW A COUNTRY DOCTOR DOES IT.

*Ac Med J (O.S) 11. 63-67, #2, Feb 1883**Editor North Carolina Medical Journal:*

It has often appeared to us something peculiar that medical journals published in the small cities, and having such a large circulation among country and village physicians, should devote so much of their space to obtruse medical subjects, and the windy, tedious, and mystifying papers of ambitious college lecturers who are working to force themselves into the domain of specialism. The aforesaid parties, on account of the frequency and persistency with which they play on one string, remind us of those self-sacrificing and benevolent pharmacists who concoct delightful elixirs, potent fluid extracts, elegant pills, and granules all for the benefit of physicians. These pharmaceutical philanthropists generally reap the reward that is due them in the shape of well-filled purses, and our no less well-meaning specialists for fear of overburdening the minds of the rural Galen rarely encumber their valuable productions with methods of diagnosis or with the details of treatment; but with open arms stand ready to receive patients from all sections in which their valuable articles have penetrated.

This is not for the purpose of teaching journal editors how to manage their affairs that we call attention to a want we have long felt, and are certain others, placed in like circumstances feel, we need to know "how to do it." And at the same time we propose to do our part towards helping our rustic brother, by detailing in the pages of this JOURNAL, some of the short and handy methods we have adopted to meet the varied exigencies of our calling. The name, Doctor, to an ordinary countryman, means a man who can rise in the morning, affect a forceps delivery before breakfast, do all sorts of operations, general or special, and attend innumerable cases of disease, acute or chronic, by night. This much is not only expected of us, but the force of public sentiment compels us to take a hand in any thing that happens in our neighborhood, and woe betide to doctor who is incompetent or too self-distrustful to take hold of anything that is presented to him. If he should hesitate about doing a strangulated hernia, an amputation, setting a broken limb, extracting tumors or fail to cut for stone, he will be called a fever doctor. If he fails to attend midwifery cases, hesitates or bungles over a gynec. case, it will be said of him that he knows nothing of women, and the fair dames will not call him to treat any ordinary affection unless his nearest competitor should be some distance off; and he retains his practice through force of circumstances.

In the treatment of fractures, says Gross, a surgeon can lose reputation rapidly, and I am sorry to add, however great his skill and perfect his cures, he does not make it as rapidly. A well limb is soon forgot while a deformed one stands permanently as a finger of reproach pointing to the doctor who failed to obtain a perfect result. I have several such fingers pointing my way at this time, but I am happy to say that with a few exceptions they are not as numerous as formerly. A good many of these cases which happened in the early part of our career nature has kindly converted into dust, and blotted out our eye-sores forever.

Some years ago when plaster-of-Paris was first introduced as a means of treating fracture I determined to use it the first opportunity. In the journal I could see frequent allusions to the splendid results obtained by its use, but could find no details for applying it. By the way, we think the lack of detail in the publication of new devices and new remedies is the chief reason why the ordinary doctor fails to keep pace with the profession's constant advancement. I consulted a neighboring dentist as to the method of mixing it, cost, &c. He told me there was a kind called dentist plaster which contained very little water and set very quickly, at the same time proposed that we should send and get a half barrel together, which we did. The cost was trifling. I put my half in a nice tight box so as to exclude the damp air which, by saturating it, would prevent it from setting promptly when needed.

My first case was one of fracture of the lower end of the fibula in a robust young man. Patient seen in a few minutes after accident and before swelling had taken place. The foot was carefully encased in a neat fitting bandage, and given to a bystander with the request to pull it in a solid straight line with the leg while I carried the roller to within two inches of the knee. The assistant continuing to make extension, I poured a quantity of the plaster in a tin basin and added water, stirring at the same time, to make a thick mortar. The mortar was spread with the hands evenly and smoothly over the entire bandage. It quickly set, another bandage was passed over this and that in turn covered with plaster and afterwards a bandage was placed over the whole so as to prevent its cracking and falling off.

In two day's time, the patient with the aid of a suspensory to hold up the foot, was enabled by the use of crutches, to attend to his ordinary affairs. The bandage was removed in due time with a perfect cure.

In the treatment of fracture of the leg and forearm the plaster has always come up to my expectation. We have never used it on a Barton's or Colle's fracture; preferring the Band splint.

The following two cases will illustrate the manner in which we usually treat fracture of the femur:

The first case was the child of a well-to-do farmer living six miles distant. Knowing before I started that I would have to deal with a fractured femur I carried an assistant. The patient, a nice beautiful little girl of ten or eleven years of age had fallen out of a wagon, in which she and some other children had been playing, and fractured the femur at the junction of the upper and middle third and near the junction of the middle and lower third. The little girl was very much afraid that she would have a crooked limb, and begged me to take great pains with it, and promised to be very good. We had never before used the plaster in a case of fractured femur and determined to use it in this case believing that we should get a perfect result.

We had the bed on which the little girl was laying carefully smoothed down and carefully covered with several layers of quilts so as to give us a smooth even surface for her to lie on. The assistant administered chloroform to complete anæsthesia and after carefully and firmly bandaging the foot and leg to the knee, I placed the father of the little girl at the head of, and at the back of, the little patient and directed him to grasp her in the arm pits and steady her.

The foot was given to the uncle who was instructed to pull in a straight line with the body until we told him to let go.

The roller was then extended evenly and firmly up the thigh to the groin and then passed around her body. The plaster was applied rather thickly but evenly from the ankle up to as far as the thigh was covered by the bandage.

In a few minutes the plaster set and the limb was perfectly stiff.

The dressing was completed by a second bandage which was covered with plaster from the toes up and the whole covered by a third roller, after the dressing of the leg I placed the foot in a small box and packed cotton around to keep it straight.

After a period of five days I removed the plaster, we first freed the foot and ankle, gave it to an assistant and placing another with his hands in her arm pits carefully kept up extension and counter-extension while we removed the remainder of the bandage. The bandage was as hard and as stiff as a thin board and fitting the leg closely up to the knee. From this point up to a small distance above the upper fracture it was not touching the thigh at any point, but the limb was perfectly straight, the swelling had subsided and considerable callous thrown out. The bulge of the calf and the conical shape of the upper part of the thigh being fitted closely by this cylinder of plaster, had kept up perfect extension and counter-extension. The leg was redressed using all the precautions as at first dressing with exception of anæsthetic.

In three weeks more, bandages were removed. Result: perfect cure. I measured the limbs using the navel as a point to measure from, using the pubic bones and crest of each ilia.

There was positively no shortening or deformity, and walk, after the fracture, was just the same as it was before.

In this case we used an anæsthetic, not only to avoid giving the little girl pain, (which we hold no man is justifiable in inflicting if he can well avoid it) but also to overcome the contraction of the muscles, thereby enabling us to accurately adjust the ends of the bone. With the first roller that we passed over the thigh by adjusting it firmly, we caused the muscles to act as a splint to the broken bone.

The splendid result obtained in this case I attribute to the care with which the details were attended to.

The double application of a thick coat of plaster which acted so perfectly in keeping up extension and counter-extension.

The next case of fracture was in a burly negro, who had fallen from a tree, and in the fall, drove in the outer table of his skull, sustained a Barton's fracture of the right forearm, and fractured the left thigh at the upper end of the middle third.

His arm was put up in a Bond's splint, and the thigh dressed as the previous case was. The bandage remained on five days and reapplied. A perfect result. No shortening discovered after most careful measurement.

I know it is a disputed point among eminent surgeons whether a fractured femur can be cured without shortening. In these two cases, we speak whereof we know, and it may be unpardonable impudence in a country doctor to say it, but we do, nevertheless, that if fractured femurs are treated after the foregoing method, that there not only ought not to be any shortening, but there will not be any if the ends of the bones are brought into juxtaposition before the bandage is applied and kept so until it hardens.

Since the above cases, we have treated an infant nine months old with a fracture of the lower third, of the left femur with a perfect result, and two negroes with results no ways perfect, which we attribute entirely to circumstances. When we were called to these cases we found them lying on the floor of their cabins where they had been piously dumped by some good Samaritan who had picked them up!

Being a prudent man, we never thought it our duty to overstrain ourselves by lifting these savory bodies upon their beds, especially as in one of these cases we would have had to furnish a bedstead ourselves before we could get them off the floor, in the other we would have had to make up the bed.

Our accomplishments as a chamber maid have always been meagre at best, and in the hurry of a busy life we have never found time to cultivate them.

This is probably the main reason why we made such a signal failure in the treatment of these cases and shows that no accomplishment should be considered of too little importance to be cultivated.

In both of these cases we had the undivided aid and assistance of women, gentle women, kind women, even if they were colored women their hearts were tender and we are sure, judging the manner in which they aided, that they would not hurt a fly.

We know from experience that we ought to have had an assistant to give chloroform, and two helpers to keep up extension and counter-extension.

The neighbors had not as yet received word that the parties had broken their limbs and had not congregated to see how they looked, to enjoy the groaning, and tell how some of their relations had to have their legs cut off, and died after all.

The doctors in my neighborhood have a singular notion, that every doctor ought to attend to his charity cases as best he can, and not thrust his good work under their noses.

Doctors, we fear, are naturally jealous and do not like for a brother to get ahead of them in their good works. Our modesty forbade us to call upon any of them, and we determined to do the best we could without ostentation or pride.

The foot and leg of these patients was bandaged after my usual plan and handed to my kind assistants to pull on. We told them to pull hard. The patients winced and said it hurt.

The good creatures were afraid they would pull the leg off and did not pull so hard. We insisted. They could not bear to hear the patients say it hurt them, and in sheer desperation we did the legs up. Result: shortening and consequent deformity, and two more colored citizens, with ungainly limbs, were added to that grand army of the nation's pets.

DEATH FROM POISONING BY A QUACK—SOME REMARKS IN REGARD TO THE ABOLITION OF QUACKERY.

Editor North Carolina Medical Journal:

Mrs. Mary K., white, widow, æt. 56, sent for me Sept. 12, 1882. When I saw her she made the following statement: That she had always been well excepting some malarial trouble—had taken calomel once in her life and was badly salivated. About two months ago a place made its appearance on side of her face just above malar process and in front of right ear; that she had been informed that it was a scab cancer and that she was advised to see Mr. R., and have him apply his medicine to it; that accordingly she went to see him and on August 12th, he

commenced his work, and that for three successive days, exactly at 1 P. M., he applied a medicine, that by the time the last application was made, her gums were very sore, tongue swollen and so forth; that she consulted Dr. —, who told her it was simply a sore mouth and gave her potash to use; that on seeing no improvement but rather growing worse, she sent for Mr. R., (the quack) who, on his arrival, seeing her condition, seemed to be greatly alarmed and advised her to call a physician at once.

When I arrived, I found her in a terrible condition all the mucous membranes were much inflamed, the alimentary canal was irritated from the pharynx to the lower part of the bowel; there was abundant secretion from the salivary glands; the breath was very fetid and the lips much swollen; the inferior maxilla seemed to be necrosed—the teeth were loose and mastication was impossible; wherever there was a fold of integument, it had broken down—under the mammae, in the groins, in the axillae, around the ears, and before the termination almost the whole surface was denuded of its cuticle which laid bare the nervous papillae, thereby rendering all tactile impressions very painful. [I would say here that I was satisfied that syphilis had nothing to do with the case]. From these symptoms the diagnosis was clear. There was no doubt but that my patient had been poisoned with mercury—with the acid nitrate of mercury, and, probably, in combination with arsenic, although the eyes did not then show any signs of arsenic poisoning, but did subsequently. To satisfy myself and others, I called Dr. Whitehead, Jr., in consultation, who confirmed my diagnosis.

Suffice it to say that during the course of treatment I gave cod liver oil, different preparations of iron, quinine, chlorate potassa, stimulants when necessary, etc. I had the sores kept as clean as possible and dusted with the oxide of zinc. Where there was no sore, I had the skin sponged twice daily with whiskey and water. This all seemed to do no good and the symptoms only grew more and more alarming. At times I apprehended pyæmic or septic trouble, but by carefully washing and cleansing the sores, and the administration of suitable diet, these were avoided. Without going into all the details of the case, I would say that before the end was reached, there were rectal abscesses, that there was great œdema of all the extremities, that there was marked mercurial fever, that the nasal passages were so raw that there was a constant sanguine discharge from the nose. These symptoms were each treated as they arose.

Anorexia was an early accompaniment, and my patient gradually exhausted and succumbed on 7th of December.

The question here is, was arsenic an ingredient of the "cancer medicine" used? We can never find out of the man who made the application, for I am told that they are under oath, to never divulge the secret

of their nostrums. (I say *they*, for there is an organized company of quack doctors in this county.)

Dr. Whitehead, who saw the case with me, was satisfied that the acid nitrate of mercury had been used, but was not sure about arsenic. Regarding the symptoms from first to last, I think there can be no doubt that arsenic was used. Nearly all the symptoms present in this case might be produced by using arsenic without the mercury. There were disordered digestion, salivation, œdema, cutaneous eruption, and, after a time, conjunctivitis. The only doubt as to the use of arsenic would be that three days would not be sufficient time to produce arsenic poisoning. I believe I have failed to say that there was an ointment (made by the quack) kept on the open sore from the third day of his treatment until I saw her, which was about one month. This might have contained the arsenic and was used long enough to have produced all the symptoms of chronic arsenic poisoning.

There is nothing of special interest in this case, only, it forcibly illustrates the necessity of abolishing quackery from our midst. Why not abolish it? This one life was worth more than all the quackery in North Carolina! The words of this lady, just before her death, were, "I want some lady to go to Congress and make laws to stop such men from using medicines." It has been said that "Hope kept alive is the success of every form of quackery." Now, can we not do something to frustrate the hopes of these men? Let every regular physician discountenance anything done by them in his locality. Let him not be afraid that he will lose the patronage of some quack, or of some one that believes in a quack, but whenever or wherever he hears any one speak of trying an irregular, denounce it in the flattest terms and cite some case of permanent injury or death that has been caused by one—the above case will serve as a foundation-stone forever hereafter, for one, in fighting against quackery. I would like to know what benefit is derived from the State Board of Medical Examiners, as it now stands, excepting where settlements are made by administrators, etc. Certainly it gives a man a license which he may take home and hang up in his office, and, if he wishes, can point his finger to it every day and exclaim, "Behold, I have a right to practice medicine!" But where on earth is the restriction to the man who has no license? Where is the law that says the man without license shall not practice medicine? Some one says, "The man who has his certificate can collect his fees by law." Probably he can, possibly he cannot. Perhaps one man in fifty will need the law to make him pay his bill, and perhaps four hundred and ninety-nine out of five hundred that will not pay without the law, are not worth a homestead. What then? *Ut quimus, quando ut volumus non licet.* The Board of Examiners is doing its duty so far as it has any power to act, but the connections are

too lax. We need more legislation in this direction. The resolution recommended by the Edgecombe Society and passed by the State Medical Society at Wilmington in 1880, was good, and was just what we need if it could pass the Legislature. I fear we will never get a resolution through, that kills quackery as dead at one blow as that did. We must step up gradually. We must work through our legislators—must let them know our wants before they enter the legislative halls, and I cannot express myself in better words than has been done by this JOURNAL in speaking of this State Board of Health: “We believe if a properly concerted effort, first, to indoctrinate the legislator with our aims and objects before he gets to Raleigh, and, afterward, to see that a clear and exhaustive argument is presented to the Legislature, we can make very important headway, if we cannot get such aid as the magnitude of the work demands.” There should be a committee of regular physicians appointed in each county in the State to confer with the legislators of said counties and to forcibly impress them with our wants—to reason with them and show them that what we are trying to do is not a professional trick—is not to benefit ourselves, but is calculated to protect those unfortunates (like Mrs. K.) who happens to be under the care of some irregular, who, by the injudicious administration of drugs, brings on premature age, or causes the loss of sight, hearing or something of the kind, and thereby renders them useless to society and makes their lives a sad failure.

I believe, as I believe that I live, that if the right steps were taken, in less than two years quackery in North Carolina would be *no more*. So let all go to Tarboro, in May prepared to do something in this direction.


MULLIN IN THE TREATMENT OF CONSUMPTION.—We find our old friend mullin, the great domestic panacea among our patients in this country, brought again to the front by Dr. F. B. Quinlan, of Dublin, in an article contributed to the *British Medical Journal*, January 27. The species recommended is *Verbascum Thapsus*. Seven cases are given to show its value, showing that it was soothing to the cough, the patients gained weight and were improved generally, even though cure was not effected. The preparation of the decoction by boiling in milk and given hot, causes a comfortable sensation. It eases phthisical cough; it checks phthisical looseness of the bowels; it gives relief to dyspnoea; it has no control over phthisical night sweats.

EDITORIAL.

NORTH CAROLINA MEDICAL JOURNAL.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY, PUBLISHED
IN WILMINGTON, N. C.

THOMAS F. WOOD, M. D., Wilmington, N. C., Editor.

 *Original communications are solicited from all parts of the country, and especially from the medical profession of THE CAROLINAS. Articles requiring illustrations can be promptly supplied by previous arrangement with the Editor. Any subscriber can have a specimen number sent free of cost to a friend whose attention he desires to call to the JOURNAL, by sending the address to this office. Prompt remittances from subscribers are absolutely necessary to enable us to maintain our work with vigor and acceptability. All remittances must be made payable to THOMAS F. WOOD, M. D., P. O. Drawer 791, Wilmington, N. C.*

PHTHISIS IN THE SOUTHERN STATES.

Apart from accurate statistical information on the subject, unattainable at present, there is very good reason for the belief that consumption in the Southern, is far less prevalent than in the Northern States, although it is believed that this disease is largely on the increase since the abolition of slavery, among the negroes and mulattoes.

It is from the stand-point of a general practitioner, and not from that as a statistician that we speak. Even if statistics were at hand of the past-bellum period, we could hardly draw a more satisfactory inference from them, than we could obtain from a life-time residence and observation, and for the reason that we have no means of comparing ante-bellum statistics.

We start out with the assumption* that consumption is increas-

*We happen to have at hand the yearly report of Dr. J. C. Walker, late Superintendent of Health of New Hanover County, (1880), in which we find the following items for the city of Wilmington: In a population of 18,000 of which 7,216 are whites and 10,784 negroes and mulattoes there were six deaths from consump-
tion

ing in the towns of the South, and that this increase is dependent upon the great social changes which have taken place, incident to the war.

The most apparent increase of consumption is among the negroes and mulattoes, and for reasons generally conceded by physicians of experience, as follows :

1. The large inroads which syphilis has made among them.
2. The huddling together of large families in small, ill-ventilated huts.
3. Exposure and insufficient food.
4. The freedom with which strong spirits are indulged in.

Syphilis among the negroes is far more common now than during the period of slavery, and there is no question that a large proportion of deaths in early infancy is due to this inherited vice, the diarrhœal diseases, and the convenient term marasmus substituting the undiscovered prime factor. Negro men, particularly those much about public resorts, such as musicians, barbers, waiters at hotels, livery-stable men, suffer quite extensively from venereal diseases, and it is a matter of common observation that these easily fall a prey to consumption. Of late years we have rarely seen a phthisical negro who did not give a syphilitic record. And so these men transmitting this disease to their children, we have more and more frequently cases of scrofula and consumption—or tuberculosis in some shape.

It is quite obvious how syphilis progresses to the final undermining of the constitution among them. With a syphilitic negro, nothing seems to give him any concern but the inconvenient pain of the chancre. (He is more liable to phagedœna than the white.) But heal up a chancre for a negro, or discharge a bubo for him so that his locomotion is no longer hindered, he considers himself quite free to indulge in promiscuous intercourse, and to eat and drink as he pleases. They are not annoyed with syphilides like white men, and we have seen very few who have iritis, or alopecia. Nodes and

among the whites, and 28 among the negroes. December and April being the periods of the largest mortality, and it agrees very nearly with the record of other years, given in the Bulletin of the National Board of Health. This, no doubt, is a fair ratio of deaths from consumption between whites and blacks, confirmed by observation. The same year from which this table was taken, there were 100 deaths among the whites and 283 among the negroes. And it is curious to note that the same year there were 26 negroes and 7 whites dead from malarial (paludal) fever, notwithstanding the well known power of resistance to marsh malaria by negroes.

gummata are not uncommon, but unless a node should appear on the forehead very few would be alarmed enough to seek medical advice. For these reasons a syphilitic negro is just the person the doctor would look for to develop phthisis upon the first favorable opportunity ; and such is the case.

The overcrowding of negroes in their small huts is worse than ever before. It is astonishing how a negro will awake, apparently refreshed after being smothered in a closet, wrapped from head to foot, too, in a hot August night. Nevertheless, we believe that their power of tolerance in this direction is decreasing, because of their adoption of so many vices in their intimate and promiscuous intercourse—vices which have weakened their physical nature. Added to all this, these people are beginning to adopt the convenient cast-iron stove in place of the old-fashioned fire place, or fire in the open air.

Exposure and insufficient food have also a great deal to do with the physical condition of the negro, as it does with the white. The kind of exposure indulged in by negroes, more especially, in the habit of prowling at night. In every little Southern town you will see this exemplified. He exposes himself to rains and fogs and malaria, nothing is a hindrance to him but cold.

Drunkenness, the great starting point of a syphilitic history, is not uncommon, and yet we do not think that there is the same abandonment of the negro to it, as we understand to be the case with Indians. Hard drinking, though, is common in all the towns and villages, especially those along the lines of the railroads.

It is probable that no laboring classes indulge so freely in fat pork as do the Southern negroes. In the sea-coast towns, they are the largest consumers of the coarse oily fish—such as mullet and sturgeons—their craving being for fats in any shape. From choice, also, they eat coarse corn-meal in preference to flour, for bread. In reality, though, as there are so many idlers, there must be lack of food, and the number of badly nourished negroes is always large in the towns. Taking the average of Confederate soldiers as examples of large bodies of ill and irregularly fed people, the resistance of disease by the latter was far greater than the former. The analogy is still more perfect when it is remembered that the Confederate soldier was fed upon fare against which negro laborers would very soon rebel.

In reality our experience leads us to believe that the white can do active work and keep in good physical condition, upon food that would be entirely inadequate for the black man.

As for the whites, we think the very small number of deaths from consumption is due to the favorable climate, especially south of 34°. This enables every one to be in the open air for many months in the year. The construction of the houses too, is a matter of great importance. The house of a family, even of small means in the South, is constructed with piazzas, enabling the family to sit out in the open air until late at night. The openings in the house are quite numerous, even besides the doors and windows. The houses are warmed with large open fire-places, or with grates in some of the towns. The all but universal custom is to have open fire-places, which are only capable of heating a room to a degree that would set a northern man to shivering. Gradually, though, we see the stove, an abomination of our civilization, introduced into our houses, because although wood is not yet very high, the stove saves trouble, and enables the housekeeper to get along with fewer servants. The latrines as offensive as they sometimes are, giving out almost caustic odors from their vine embowered nook at the back of the large lot, emit largely diluted harm, as compared with the average "modern improvement" arrangement of a water closet in the house.

A southern family in the country will sit down to breakfast with a huge fire roaring in the chimney, while the door at the other end of the dining room may be wide open and icicles hanging from the roof. So that fresh air in quick currents and large volumes is a peculiar feature of Southern life. The mass of the people know nothing of a "living room" heated up to 78° F., as we have seen it in New York, for a number of days consecutively.

Why pneumonia should be so uncommon in the South we can understand upon no other theory, than the mildness of our climate, and the little difference between the temperature indoors and out. We are sure of this though, that although consumption has many other beginnings than in pneumonia, the ratio of Southern prevalence of consumption would be greater if pneumonia were more prevalent.

After all, phthisis stands nearly at the head of the list in the mortality tables, and will continue to hold its place, as the population becomes denser; but as phthisis increases, malarial diseases diminish, both as to the number of cases, and the virulency of the attacks.

Whatever may be the theory adopted as to etiology of phthisis, it is certain that the negroes suffer very largely from it, and it is interesting to observe that while in the North the white population of all classes are largely the victims of phthisis, the white people in the South are measurably exempt.*

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THE CONFEDERATE STATES MEDICAL AND SURGICAL JOURNAL.

As complete sets of this publication are becoming quite rare, we have thought it well to put on record, as a matter of interest to ex-Confederate medical officers, and those book collectors who may not know the state this work was left in at the close of the war, some items we have collected.

The first number was issued in January, 1864, and the last in February, 1865. The following letter from Prof. Middleton Michel, of Charleston, supplies us with the narrative of the last days of the *Journal*:

CHARLESTON, February 10th, 1865.

DR. THOMAS F. WOOD:—*My Dear Doctor*:—The January and February numbers of our Confederate States *Medical and Surgical Journal* for 1865, were, indeed, the only ones ever issued. The March number, however, was printed and ready for issue when all was burnt up in the Richmond conflagration!

By the way, the March number contained a long report of mine on the introduction of Yellow Fever into Wilmington and Smithville, which I had read before the Association of Army and Navy Surgeons, and which was ordered to be published. I actually printed a part of the article myself, setting up the type with the aid of a one-armed soldier, who was the only available assistant or

*This opinion does not agree with that given by M. Ruzé: (*Étude de la phthisie à la Martinique*). His statistical tables show, that the white creoles offer the greatest contingent of deaths from tubercular disease, and next to them mulatto women, for in this latter class is found the most complete assemblage, of the vices of idleness, Bouchardat's "*Traité d'Hygiène Publique et Privée*, etc., Paris, Germer Baillière et cie, 1831.

printer in Ayre's office in Richmond, at the time. I distinctly recall the pleasure I took, in those hours of political despair, in diverting my mind in its moments of leisure, by collating, and transcribing my MSS. notes taken while on this official duty in your city; writing my article; learning to set type; and in actually printing part of my own essay.

Truly yours,

MICHEL.

This *Journal* was well edited, and printed on very good paper for the times. It was the size of the present form of *Boston Medical and Surgical Journal*. It was issued monthly, the first year at \$10 a year, the second at \$20.

Of the papers especially interesting to us, were those by Dr. Wm. T. Wragg, of Charleston, on the Yellow Fever Epidemic of Wilmington, in 1862. This paper was reprinted since the war in the *New York Medical Journal*. Dr. Will. Geo. Thomas, of Wilmington, replied to it, and his paper was answered by Dr. E. A. Anderson, of Wilmington.

At this early day, carbolic acid was making its way into public notice, but there was great confusion in the medical mind as to its proper chemical position.

Perhaps the most interesting chapter in the medical history of the Confederacy found in these old Journals, is the part which indigenous remedies played. Notwithstanding there was a strong effort made by the Surgeon-General to bring our native plants into use, certainly in the field, very few of them were used.

Pinckneya pubens made a hard struggle for the therapeutical position its botanical relation suggested. The application of oil of turpentine upon a girdle of flannel during the cold stage of fever had also a short period of claimed success. But nothing could supplant quinine notwithstanding its reputed scarcity.

We are glad to be able to rescue these old journals from oblivion.

We regret to be called upon to record the death of Dr. GEORGE M. BEARD, in his 44th year. He was one of the most energetic and voluminous writers in his specialty.

REVIEWS AND BOOK NOTICES.

THE WOODS AND TIMBERS OF NORTH CAROLINA. By P. M. HALE. Raleigh: P. M. Hale, New York. E. J. Hale & Son. 1883. Pp. 271. Price \$1.25.

This volume, as its title page professes, is a compilation from the Botanical and Geological Reports of Dr. Curtis, and Profs. Emmons and Kerr. The first part of the volume is a reproduction of Dr. Curtis' "Woody Plants of North Carolina," a work which has been long out of print, and for years much sought after. It has formed the basis of many valuable reports since, and indeed the volume on "Forestry" issued from the Agricultural Department would have been a very poor book without it.

Dr. Curtis was a very practical, common-sense botanist, and although possessing the highest degree of technical knowledge, so high indeed that his strictly scientific work had few readers in the State, he made his knowledge subservient to every day wants. His "Woody Plants" was intended as a manual of forestry, a guide to the farmer and woodsman, for the identification of trees, shrubs and vines. This he accomplished by inventing a key to the genera and species, based upon the character of the fruit.

The editor has added a report on the Forests of North Carolina, prepared by Prof. W. C. Kerr, and also authentic reports alphabetically by counties of the forest acreage and other material of interest. He gives the long-leaf pine (*Pinus Australis*) in 15 counties at 5,299,000,000 feet.

The farms of North Carolina are also tabulated by counties, taken from the census of 1880. The volume is concluded by an account of the Railroads of North Carolina, and a map of the State.

We call attention to the footing up of the table of species as enumerated in Dr. Curtis' "Catalogue of Indigenous Plants." Since the catalogue was issued several species have been added by Dr. Curtis and others, swelling the number to 4,865 instead of 4,849.

Mr. Hale has done a good service to his native State and to the public, in reproducing such a valuable volume, and we are sure it will be largely read. It is adapted to the wants of such a large

number of citizens, and must prove an acceptable guide to all persons seeking knowledge of our forests. For advanced scholars in academies, it is far more important that they should master a practical work like this, than to acquire the smattering of botany usually taught.

The question is now who will be the botanist to reproduce the "Catalogue of the Indigenous Plants of North Carolina," and edit it properly? New Jersey has recently sent out a botany of that State which eclipses it, and Dr. Curtis' services to the State could not be more properly recognized than by bringing his great work up to the standard he desired to set.

MANUAL OF THE PRACTICE OF MEDICINE. By HENRY C. MOIR, M. D. Second Enlarged and Revised Edition. New York. 1883. James H. Belding. Pp. 455. Cloth.

This manual is designed for the use of students and practitioners. It is not a treatise on the Theory and Practice of Medicine, nor does it claim to be such. Neither does it claim to fill "a long-felt want;" but a careful examination of it, by one who has crammed for a hospital or graduation, will show that a want has long been felt which is now filled by this unpretentious little book. To the student who wrestles for hours over incomplete notes, it will be worth double its weight in gold. With the facts contained therein at his command he need fear no examination that can be set on the practice of medicine. Though a student's book, it will not be out of place in the practitioner's library, for it will save many hours of fruitless reading through the legion of theoretical pages which have found their way into so many of our standard books. The plate facing page 131, showing the direction and position of the murmurs in cardiac disease, is true to the facts in the case. We venture to say that, as a condenser, Dr. Moir has few equals in the country.

W. G. E.

ANNUAL REPORT OF THE BOARD OF DIRECTORS, AND THE SUPERINTENDENT OF THE INSANE ASYLUM (at Raleigh) for 1883.

The affairs of this Asylum seem to be managed economically and thoroughly, as shown by this report. We congratulate the Superintendent, as well as his patients, that he will be able to reduce the number of inmates, by sending one hundred to the Morganton

Asylum. Dr. Burke Haywood, in behalf of the Board of Directors, of which he is president, asked the Legislature to draw a line through the State, dividing as nearly as possible, the number of the white insane between the Eastern and Western counties. This line to be changed from time to time according to the capacity of the two asylums, to accommodate patients. This line, as now suggested, "to begin at the southern boundary line of Virginia, thence to run South, with the Eastern boundary lines of Rockingham, Guilford, Randolph, Montgomery and Richmond, to the northern boundary line of South Carolina.

We have urged more than once the necessity of having young men in training on the specialty of diseases of the mind, and we are pleased to see that the Board of Directors have recommended it to the attention of the Legislature, as follows: "The hospitals for the insane in this State should be used as training schools for two or more young men, natives of this State, recent graduates in medicine of first class medical colleges, who shall be unmarried and licentiates of the North Carolina Board of Medical Examiners. These young physicians could thus be educated as specialists, and fitted to discharge the duties as medical officers for our hospitals for the insane."

It is a source of congratulation to every citizen to feel that the care of the insane is entrusted to such able and humane gentlemen. We trust that crude and meddlesome legislation may not hamper this great work. Officers in charge of the insane have a great responsibility upon them, and they deserve the support and sympathy of every good man.

*MORBID CONDITIONS OF THE TONGUE.

Not the least instructive of the remarkable papers brought together in Mr. Hutchinson's admirable work, is the last fasciculus on *Morbid Conditions of the Tongue*. The lithographs are very superior, although they convey perhaps a heightened pictorial effect they would hardly mislead on this account. An examination of the first plate gives in a group, for easy comparison, a case of (1) "Long persisting syphilitic glossitis, with hypertrophy;" a case of (2) "Chronic sclerosis of mucous membrane from syphilis and

**Illustrations of Clinical Surgery*. By Jonathan Hutchinson, F. R. C.S., Fasciculus xv., 1882.

smoking, and very dense leucomata ;" (3) "Recent and transitory leucomatous eruption on the tongue;" (4) "Follicular stomatitis in a young child;" and (5) "Thrush in an infant." The three first mentioned are specimens of syphilitic glossitis, of different forms, showing as to the first an incurable, indurated and hypertrophied tongue, and in the third a more superficial attack, liable to be confounded with a similar condition seen in lichen-psoriasis, figured in the second plate. Mr. Hutchinson says: "In the course of secondary syphilis it is, as every one knows, exceedingly common to have the mucous membrane of the mouth inflamed coincidently with an eruption on the skin. It is, in fact, the rule rather than the exception. It is, however, very rare to find tongue eruptions associated with any of the non-syphilitic forms of skin diseases. In fact, white patches on the tongue are in the eyes of many almost certainly indications of syphilis. There can, however, be no doubt that we do occasionally see patches on the tongue and cheeks in association with common psoriasis, lichen-psoriasis, and pityriasis rubra. * * * I have once or twice seen patches on the tongue in cases of common psoriasis, but they are very rare indeed, and seldom well marked. Thus it would appear that lichen-psoriasis is the eruption most frequently attended by tongue patches. * * * In all cases the spots disappear under treatment by arsenic, and when attended by skin disease sooner than the general eruption."

The lessons in differential diagnosis of simple and syphilitic glossitis and the examples of warts, hypertrophies, atrophies and cancer are very valuable, and are so deeply impressed by the portraits as to make a permanent impression on the mind of the casual reader.

The last plate in this unusually interesting fasciculus is a beautiful representation of a myeloid tumor (Giant-sarcoma) of the knee, accompanied with microscopical appearances.

THE NEW YORK CODE.

The New York State Medical Society decided by a small majority to adhere to the new code. We conclude that it was a matter of business necessity with our New York friends, of far more impor-

tance to them than fraternal relations with the American Medical Association.

TRANSACTIONS OF THE TWENTY-NINTH ANNUAL MEETING OF THE MEDICAL SOCIETY OF NORTH CAROLINA; AND CONJOINT SESSION OF THE NORTH CAROLINA BOARD OF HEALTH, HELD IN CONCORD MAY 9th-11th, 1882. Wilmington: Jackson & Bell. 1882. Pp. 197-LXVI.

The delays which have occurred since the meeting of the Society and Board of Health have been numerous and annoying. The volume presented is much larger than ever before printed by the Society, and probably more interesting. The Committee on Publication is not responsible for the delay, for the reason that such a large committee could not very well act in unison, and the details of the work had to be left to one of their number. That individual member was perplexed by the long struggle of the printer over difficult copy, and by the large amount of proof reading entailed upon him in addition to his regular duties.

VARIOLA: A SERIES OF TWENTY-ONE HELIOTYPE PLATES, ILLUSTRATING THE PROGRESSIVE STAGES OF THE ERUPTION. Boston: Samuel A. Powers. 1882. (Price \$5.00.)

The title page indicates the contents of this volume, but fails to say how successful the photographer and printer have been in the performance of their work.

The first plate gives a patient on the third day of the eruption, of a case of discrete small-pox. The size of the plates is small octavo, which brings the eruption down to a very small scale, but a pocket magnifying glass is sufficient to bring out the details sufficiently strong for recognition. Sixteen portraits of the same patient are given, in successive stages, and five other heliotypes, one of an infant, two of a woman, and two admirable concluding ones, one of them showing eruption on the thighs and legs (considerably enlarged), and one giving the vesicles the actual size of the pustule.

As a guide to diagnosis nothing could be more perfect. We know of cases involving great interests besides the reputation of the physician, in which such a book of reference would be worth

its weight in gold. To all interested we advise them to supply themselves with this volume.

THE FUNCTIONS AND DISORDERS OF THE REPRODUCTIVE ORGANS IN CHILDHOOD, YOUTH, ADULT AGE, AND ADVANCED LIFE, CONSIDERED IN THEIR PHYSIOLOGICAL, SOCIAL, AND MORAL RELATIONS. By WILLIAM ACTON, M. R. C. S. . Sixth Edition. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1883. Pp. 267. (Price \$2.50.)

From the time the first edition of this valuable work appeared, it was evident that the author was not only fully versed in the subject he had undertaken, but that he also had the rare skill to put his knowledge in such a shape as to give his book a classical standing. This edition has been carefully prepared, and apparently much new matter added.

That this work has gone on to its sixth edition indicates its popularity, not only among physicians, but also among general readers.

EXPERIMENTAL PHARMACY: A HAND BOOK OF METHODS FOR STUDYING THE PHYSIOLOGICAL ACTIONS OF DRUGS. By L. HERMANN, Professor of Physiology in the University of Zurich. Translated with the author's permission, by ROBERT MEADE SMITH, M. D., University of Pennsylvania. With 32 Illustrations on Wood. Philadelphia: Henry C. Lea's Son & Co.. Pp. 201.

This work is a text-book for students, for their guidance in the physiological laboratory, and to the translation the editor has added many original paragraphs, and he has introduced numerous illustrations from the larger volumes of Sanderson, Foster, Bernard and others. In size this work is much more handy than similar laboratory manuals, and must prove acceptable to the student in this department of study. If only such books as are sound are added to the literature of this advancing branch of medical research, we will ere long have no reason to regret that the laws of Great Britain have closed their physiological laboratories, only to open our own.

PROGRESS OF MEDICINE.

PILCHER ON CARE OF THE TRACHEA AFTER INCISION FOR CROUP.

—Dr. Lewis S. Pilcher, of Brooklyn, discusses in the *Annals of Anatomy and Surgery*, September 1882, the special conditions found in the trachea after its incision for the relief of the croup.

The extent and character of the intratracheal exudations are, it is pointed out, amongst the most important conditions upon which the success of tracheotomy depends. Dr. Pilcher's personal experience as to the relative frequency of extensions of the exudation below the larynx has been derived from thirty-one cases of diphtheritic croup, in which the trachea had been opened. In eighteen of these, the exudation had not extended beyond the larynx at the time of the operation; and of these, in fourteen it remained limited as at first, but in four the exudation rapidly extended throughout the trachea to the smaller bronchi. The period after operation at which death supervened in these cases was quite uniform, having been thirty-two hours in three, and thirty-six hours in one case. In thirteen instances, the trachea (when it was incised) was found to contain already more or less membranous exudation. The large proportion of cases in which, according to his experience, the exudation remains limited to the larynx will (Dr. Pilcher states) be an encouragement to operate, although in too many cases it will be found that fatal results still accrue, notwithstanding the operation, from causes apart from the presence of the exudation in the trachea. The natural history of the intratracheal membranous exudation varies, it is stated, in different cases. In certain instances it speedily exfoliates in large masses, whilst in other cases the membrane gradually disintegrates, and is ejected in small shreddy portions, or disappears slowly, particle by particle, without any recognizable membranous flakes ever being present in the expectoration. The cases marked by a ready exfoliation are those in which the depth and intensity of the local disease is slight, and in which recovery may be anticipated, provided that the special dangers incident to the location of the deposit be overcome. In certain of these cases, at the very moment of the incision of the trachea, by the first violent expulsive efforts that follow, the loosened membrane is ejected through the opening; and from that moment the

simplest precautions to prevent damage from extraneous influences will alone be necessary to secure unimpeded and speedy recovery. In those cases in which the detachment of the exudation is delayed, and the loosened pieces of membrane, usually mingled with viscid mucus or muco-pus, cannot be readily expelled, suffocative crises are provoked that for a time seem to threaten the utmost peril, and, in many instances, when skilled assistance is not instantly rendered, may cause death. In any case where there has taken place a membranous exudation within the trachea below the point of incision, such a suffocative crisis is likely to suddenly arise at any time during the period of its exfoliation. The most important practical conclusions growing out of the relations of the membranous exudation in cases of tracheotomy for croup are thus briefly stated by Dr. Pilcher—(1) Whether the trachea is involved in the exudation or not cannot be determined with certainty in most cases previous to the incision of the trachea. (2) The continued presence of the exudation within the trachea after its incision is always a source of danger. (3) The proportion of cases in which the exudation exists within the trachea is so great, that every case in which there is any doubt should be treated as one of intratracheal exudation. (4) In every case in which operative relief is attempted the operation should be planned and executed with the view of exposing and, as far as possible, removing an intratracheal exudation.

Dr. Pilcher is of opinion that in tracheotomy for croup the point of incision should be as low as possible; and he is satisfied, from his own experience, that few cases will be met with in which the opening of the trachea below the thyroid isthmus will not be perfectly practicable by methods of operation that will not fully satisfy the indications for the necessary after-management of the trachea. Two devices have enabled Dr. Pilcher to become nearly independent of assistants in the performance of tracheotomy, while at the same time they have greatly facilitated a deliberate rapidity in all its steps. The first of these is the little catch-forceps known as the hæmostatic forceps of Péan, by which all hæmorrhage may be controlled with facility, and which serves as an automatic retractor when fixed in the deeper parts of the incision and caused to fall outwards upon the side of the neck; the second device is a retractor

for the tissues at the lower angle of the wound, terminating at one end in a sharp double hook, which is to be fixed in the integument over the sternum. Except in very urgent cases, where respiration is just on the point of ceasing, it is held necessary to arrest all hæmorrhage before incising the trachea. In cases in which the trachea is found to contain an exudation, in the process of exfoliating every effort should be made to secure its prompt removal by the introduction of feathers or small pieces of soft sponge grasped by slender curved forceps. Whenever, during the after-treatment, symptoms of obstruction develop, which are not speedily relieved by removal of the inner tube, or by the passage of a feather or forceps through the tube into the trachea, the whole tube should be removed and the needed intratracheal manipulations be performed through the naked aperture in the trachea.

The first thing in the treatment of catarrhal inflammation after tracheotomy is to insure that the air entering the trachea shall be warm, moist, and pure. To accomplish this it will not be necessary, Dr. Pilcher holds, that the temperature of the whole room should be elevated, nor that it should be filled with steam, and not even that the child should be placed within a tent or tracheotomy cot, into which a cloud of steam is being continually introduced. Equal advantage, it is asserted, can be obtained from the almost constant application over the mouth of the tube of a moderately thin and broad slice of sponge disinfected and kept moist with warm water. Whenever difficulty is experienced by the patient in coughing out the tracheal secretions, inhalations of vapour, and instillations and injections of liquids, may be practised.

However perfectly bleeding may have been arrested before the trachea is opened, some hæmorrhage will follow the incision of the trachea, from the divided vessels of the tracheal mucous membrane. This flow usually soon ceases spontaneously, and the small quantity of blood that has been effused is readily coughed up. Occasionally, however, this internal hæmorrhage is persistent, and the author refers to two of his cases in which the continuous bleeding from the trachea demanded special care for its arrest.

In some remarks on pressure sores after tracheotomy, Dr. Pilcher states that the mere pressure of the cannula does not seem to be the only thing at fault in the development of ulcerations of the

trachea, as the prolonged wearing of a cannula after tracheotomy in other conditions, and even in certain cases after croup, without unpleasant pressure-effects ever being experienced, is sufficient to prove. The vitality of a tissue which has been the seat of a diphtheritic exudation is impaired; there is a natural tendency to necrosis; the more intense the diphtheritic process, the greater the necrotic tendency. In such cases, the slight additional irritation afforded by the pressure of the cannula suffices to determine a slough. By far the most frequent seat of these ulcers is upon the anterior wall of the trachea, below the inferior angle of the tracheal wound, at a point corresponding to the lower end of the cannula. The most important symptoms which indicate the existence of ulceration are two—namely, the appearance of bloody streaks in the expectoration some days after the operation, and a black discoloration of the lower end of the tube. Dr. Pilcher thinks that, in cases where ulceration of the tracheal wall is thickened, the recommendation of Dr. H. A. Martin, of Boston, that the cannula should be dispensed with, and the edges of the tracheal incision be attached to the edges of the external wound, might well be adopted, if it should be found possible upon further trial to keep the tracheal aperture patent in this way.

Dr. Pilcher concludes this able contribution on tracheotomy with some remarks on necrosis of cartilages, intumed cartilages, and granulation vegetations.—*London Medical Record*.

TREATMENT OF COUGH AND EXPECTORATION.—Notwithstanding that the above symptoms occur with almost monotonous frequency among our patients, the treatment of the conditions producing them is still in almost unsatisfactory state. Most of the remedies used are of a purely empirical character, which, from our ignorance of the *rationale* of their action, must be employed in a more or less haphazard fashion. Even those remedies of whose chemical action we know something, are simply supposed, on extremely imperfect grounds, to have certain analogous physiological actions. We are, therefore, glad to welcome the results of certain careful observations and experiments by the accomplished Professor of Materia Medica and Pharmacology at the University of Würzburg.

Before entering on these, Dr. Rossbach discusses shortly the

commonly recognized expectorants (*Berlin. Klin. Wochenschr.*, 1882, Nos. 19, 20), such as warm decoctions, alkalies, emetics, balsamic, aromatic, and astringent drugs, narcotics, and substances of a sharp irritating character, like vinegar, or of an indifferent character, like steam. Of the directly observed effect of these remedies on the mucous membrane, there is no record, Dr. Rossbach says, in German literature; and we do not remember having seen any in English literature. Through a wide opening in the trachea, Dr. Rossbach observes directly the effect of medicines either taken internally or applied locally, while at the same time he has beside him an undrugged animal for the purpose of comparison; this last being, we should say, a most important point, as even simple tracheotomy may cause considerable changes in the mucous membrane of the trachea.

Dr. Rossbach first directed his attention to the effect of alkalies on the mucous secretion; the preparations used being, internally, sodic carbonate and ammoniac chloride; locally, solution of sodic carbonate and liquor ammoniac. A dose of thirty grains of sodic carbonate, or fifteen grains of ammoniac chloride, injected directly into a cat's femoral vein, produced substantially the same effects, and these effects were somewhat unexpected. The usual theory of the effect of alkalies is, that they render the mucus more soluble, and hence more easily expectorated. The changes observed by Dr. Rossbach were a gradually increasing pallor and greyish white appearance of the mucous membrane, and, ultimately, a complete cessation of the mucous secretion. While the mucous membrane of the normal animal, after being dried with blotting-paper, became moist again in two minutes, that of the drugged animal showed no trace of mucus till ten minutes; and, if this small quantity were dried off, no more appeared. What the cause of this cessation is, Dr. Rossbach does not say, but it cannot be the anæmia, as the secretion continues unaltered in much higher grades of anæmia from nerve-stimulation. The diminution of the blood-supply and mucous secretion of the bronchial membrane, evidently tend towards an actual cure of the pathological conditions usually involved. Solutions of one to two per cent. of sodic carbonate applied locally seemed to produce no effect; but even very weak dilutions of liquor ammoniac caused a marked injection of the

mucous membrane, with distinctly increased secretion. The local application of a weak solution of acetic acid produced the same effect as liquor ammoniæ; and Dr. Rossbach, both from his experiments and observations, is strongly opposed to the use of this drug in throat affections.

The astringent remedies observed were tannin, alum, and nitrate of silver. Local application of the former two caused the surface to become pale, the opaque epithelium, however, preventing the condition of the blood-vessels from being observed. The secretion was completely abolished, the surface being dry and shining. These facts were still more markedly true of solution of nitrate of silver, which produced a shaly limited patch of chalky white color, over which the mucous secretion was entirely absent. Dr. Rossbach is inclined to believe that the vessels are really contracted, and from a long experience he strongly recommends the local application of solution of nitrate of silver in all cases of inflammation of the mucous membrane, more especially when accompanied with pain, feeling of dryness, etc.

The local effect of oil of turpentine on the mucous membrane was somewhat perplexing, as, when sprayed directly on a spot, it caused dryness of the mucous membrane, while a two per cent. solution dropped on a spot caused an increased mucous secretion, notwithstanding that there was a diminution of vascularity. Dr. Rossbach strongly recommends oil of turpentine, both internally and locally, in cases of chronic bronchial catarrh, more especially with putrid expectoration. He believes that it has not only an antiseptic, but also a refrigerant and narcotic effect.

The action of apomorphia, emetine, and pilocarpine was observed both in large and in small doses. With all three, but more especially with the last, there was a very great increase of the mucous secretion in the larynx, trachea, and bronchi, the mucous glands becoming so large as to cause projections on the surface. This effect Dr. Rossbach proves to result from a direct action of the drug on the gland itself, the circulation of the blood being quite unaffected. The subsidiary effects of pilocarpine render it unsuitable as a practical expectorant; but apomorphia Dr. Rossbach considers to be the prototype of all expectorants, giving in his hands most excellent results. He administers it as hydrochlorate

of apomorphia in doses of one-fifteenth to one seventh of a grain thrice daily, with a little dilute hydrochloric acid, the mixture being kept in a dark bottle and containing no sugar.

Lastly, Dr. Rossbach gives the results of his experiments with atropia and morphia. Atropia produces extreme dryness of the tracheal mucous membrane, accompanied by a gradually increasing hyperæmia. Its effect in deadening the irritability of the membrane is, he finds, very uncertain; while, on the other hand, the effect of morphia, both in diminishing the secretion and lessening irritability, is constant. Another advantage possessed by morphia is that the diminution of the secretion is never so great as to be followed by inflammation, which, he asserts, is frequently the case with atropia. A combination of morphia and apomorphia he has found extremely useful in cases of difficult expectoration, while a combination of morphia and atropia has given excellent results in cases of chronic catarrh, emphysema, and phthisis. Electrical stimulation of the superior laryngeal nerve causes distinct contraction of the blood-vessels, justifying, therefore, Ziemssen's recommendation of percutaneous electrification of the larynx in cases of obstinate chronic inflammation.—*British Medical Journal*.

THE MEDICAL PROFESSION RESPONSIBLE FOR PROPRIETARY MEDICINES.—The medical profession is responsible, and should be held so, for the success of nearly all the proprietary medicines that adorn the shelves of many of our first-class drug stores. And why, the question is asked, do these patent nostrums have so many votaries and meet with such success? The question is easily answered. Nearly all such alleged remedies are the result of prescriptions written by educated medical men and for a legitimate purpose, or for a stipulated sum, and most of them accompanied by the certificates of weak-minded professional men, as well as simple-minded hypochondriac patients. To illustrate this: Many years ago, a professor in one of the most respectable medical colleges in New England, on his return from Europe, was called upon by one of the leading druggists for advice, and on being told his case was dyspepsia, wrote him a prescription. After the druggist's health was restored he used the prescription for a proprietary medicine, and the result was a fortune, for it was endorsed by many of the

leading physicians of New England, including some professors whose memories are cherished by the members of this Society. The druggist retired on a fortune, while the professor died comparatively poor. This is only one case out of a great many. Like quackery, all such medicines would have had an early grave, and pæans of victory would have been sung, but for the influence of those men who would scorn to be called quacks. That patent or proprietary compounds should hold such influence may be surprising to many, yet when we take into consideration that from worm lozenges up to the great health restorer "par excellence"—cod-liver oil—not only receive the sanction of the charlatan and ignorant, but of a large percentage of educated men and even women in the different professions, who are daily indorsing the glowing accounts of the wonderful cures as set forth by the pharmacists, when reason and common sense should teach us that the latter possesses no medical curative properties, that lucca oil, fresh butter or oleomargerine does not contain. A large share is procured from dog fish and other sources, and sold for genuine cod-liver oil, to be prescribed for nearly every disease, both known and unknown. At the present time there is a large competition between wealthy firms in the trade of cod-liver oil and its various emulsions, and that for the very reason that they receive the sanction and are endorsed by scores of what we would consider first-class physicians, and this done frequently for a stipulated price or a few bottles as samples. I would as soon endorse Mrs. Winslow's Soothing Syrup, Lydia Pinkham's Compound, or the honest Shakers' remedies. Gentlemen, my word for it, no patient ever got well on cod-liver oil that would not get well on lucca oil or fresh butter. What will scientists say twenty years from now, or even the honest doctors? Cod-liver oil will be cast aside and ignored, like thousands of other exploded theories or humbugs. Twenty years from to-day the poet will sing of it as the lost cause, and it will read something like this :

O wondrous fish ! of creatures chief,
Create, to give new life to man ;
For sorest pain to bring relief
And lengthen out his mortal span,

O glorious cod ! is thy small liver,
Of health and strength, my ailing giver.

So thought the world in days gone by ;
But now, go tell it to the fishes,
E'en they will answer, with a sigh,
Things go of late against our wishes ;
The sons of men no longer toil
To win the great cod-liver oil.

— *President's Address, N. H. Medical Society, June, 1882.*

THE CARBOLIC ACID TREATMENT OF TYPHOID FEVER.—Dr. Desplats, of Lille, has recently published, in a local medical paper, the results of the treatment of typhoid fever by the internal administration of carbolic acid. His observations are based on 32 cases in which the temperature seldom exceeded 104° (these were not systematically treated with carbolic acid), and on 53 moderately severe cases, where the evening temperature reached 104° , as a rule, and occasionally exceeded 105.5° . Out of the 32 mild cases, 2 died of perforation of the intestine ; whilst two of the 53 more serious cases died before the carbolic acid treatment was commenced. This leaves a series of 51 cases of typhoid fever treated throughout their course in the manner about to be described. Five of these died : 1 from congestion of the lung ; 1 from fatty degeneration of the heart ; 3 from exhaustion. Most of the 51 cases had lived under highly unfavorable hygienic conditions. Dr. Desplats does not consider that the mode of treatment caused the one death from changes in the heart, "for a sister of the patient in question, not treated with carbolic acid, died a few days after him, from typhoid, with fatty degeneration of the heart." He admits that the acid may play a part in causing or increasing pulmonary congestion, but "not more than any other antipyretic medicine."

The treatment was not commenced until the diagnosis of typhoid fever was clear, and the temperature at least as high as 104° . To patients ready to obey him implicitly, Dr. Desplats gave, every three hours, 100 grammes of lemonade containing 0.6 grammes of carbol, the dose being increased when the fever was high. Half these patients made no objection to the lemonade. In a few, one or two daily enemata of 0.50 to 1 gramme of phenol were given. In those who could not bear the flavor of the lemonade, nor keep

it long in the stomach without vomiting, the enema, passed by means of a long tube, was employed every three hours. The temperature fell, and the nervous symptoms became less marked after every dose of carbol; and this substance became tolerated so soon, that the dose had to be increased in order to insure further beneficial effects. But Dr. Desplats was very cautious about increasing the dose of carbol above one gramme, that is, over fifteen grains and a half. In the cases where larger doses were given, neither pulmonary congestion nor albuminuria were produced, nor increased if already present. In one instance, however, collapse followed the administration of a very large dose, by mistake. The temperature fell rapidly, and great torpidity was produced, but these symptoms disappeared in five hours. Dr. Desplats does not reckon rigors, and discoloration of the urine, and sweat, as signs of true poisoning by carbolic acid. M. Valude has observed tonic and clonic convulsions in a fatal case of typhoid fever, where only 0.25 grammes had been given, but pneumonia had long been detected before the treatment was commenced. Dr. Desplats has never seen convulsions in any of his cases, not even in one where five grammes were given at a dose, nor in a child under two years of age where 0.15 grammes were given every three hours, the temperature being very high. In conclusion, Dr. Desplats expressed his opinion that the antipyretic properties of carbolic acid prove most useful in the treatment of typhoid fever; that experience in its administration can claim a great improvement in the condition of the patients, and a marked diminution in mortality, and that bad results in cases so treated have been proved to be due to the fever, and not to the treatment.

Dr. Dreyfus Brisac has, since the publication of Dr. Desplat's opinions, arrived at different conclusions. He denies entirely that carbolic acid can act as an antiseptic in typhoid fever, still less can it destroy the contagium, seeing that all the tissues must be already infiltrated with it long before treatment begins. He believes that the acid may prove useful where antipyretics are urgently needed, but the rapid fall of temperature, cited by Dr. Desplats as one of the great benefits following the use of carbolic acid, is looked upon with distrust by Dr. Dreyfus Brisac, who believes that a patient suffering already from conditions tending to produce profound

exhaustion can ill support a sudden lowering of temperature to the extent of three or four degrees. He uses carbolic acid in the few cases where he thinks it likely to prove of benefit as an enema, for the disinfection of the contents of the intestine. Dr. Dreyfus Brisac cannot withhold his belief that the carbolic acid fashion of treatment for typhoid fever will be most ephemeral in duration, notwithstanding the authority with which it has been supported by clinical observation. The last named physician, it must here be observed, distrusts any form of antipyretic treatment of typhoid fever, preferring the use of tonics and nourishment.—*British Medical Journal*.

N.C.M. & J. (O.S.) 11: 93-95, #2, Feb. 1883

MEDICINE AS PRACTISED BY ANIMALS.—M. G. Delaunay, in a recent communication to the Biological Society, observed that medicine, as practised by animals, is thoroughly empirical, but that the same may be said of that practised by inferior human races, or, in other words, by the majority of the human species.

Animals instinctively choose such food as is best suited to them. M. Delaunay maintains that the human race also shows this instinct, and blames medical men for not showing sufficient respect to the likes and dislikes of the patients, which he believes to be a guide that may be depended on. Women are more often hungry than men, and they do not like the same kind of food; nevertheless, in asylums for aged poor, men and women are put on precisely the same regimen. Infants scarcely weaned are given a diet suitable to adults, meat and wine which they dislike and which disagree with them. M. Delaunay investigated this question in the different asylums of Paris, and ascertained that children do not like it at first before they are about five years of age. People who like salt, vinegar, etc., ought to be allowed to satisfy their tastes. Larain always taught that with regard to food, people's likings are the best guide.

A large number of animals wash themselves and bathe, as elephants, stags, birds, and ants. M. Delaunay lays down as a general rule, that there is not any species of animal which voluntarily runs the risk of inhaling emanations arising from their own excrement. Some animals defæcate far from their habitations; others bury their excrement; others carry to a distance the excrement of

their young. In this respect they show more foresight than man, who retains for years excrement in stationary cesspools, thus originating epidemics.

If we turn our attention to the question of reproduction, we shall see that all mammals suckle their young, keep them clean, wean them at the proper time, and educate them; but these maternal instincts are frequently rudimentary in women of civilized nations. In fact, man may take a lesson in hygiene from the lower animals.

Animals get rid of their parasites by using dust, mud, clay, etc. Those suffering from fever restrict their diet, keep quiet, seek darkness and airy places, drink water and sometimes even plunge into it. When a dog has lost its appetite, it eats that species of grass known as dog's grass (*chiendent*), which acts as an emetic and purgative. Cats also eat grass. Sheep and cows, when ill, seek out certain herbs. When dogs are constipated they eat fatty substances, such as oil and butter, with avidity, until they are purged. The same thing is observed in horses. An animal suffering from chronic rheumatism always keeps as far as possible in the sun. The warrior ants have regularly organized ambulances. Latreille cut the antennæ of an ant, and other ants came and covered the wounded part with a transparent fluid secreted from their mouths. If a chimpanzee be wounded, it stops the bleeding by placing its hand on the wound, or dressing it with leaves and grass. When an animal has a wounded leg or arm hanging on, it completes the amputation by means of its teeth. A dog on being stung in the muzzle by a viper, was observed to plunge its head repeatedly for several days into running water. This animal eventually recovered. A sporting dog was run over by a carriage. During three weeks in winter it remained lying in a brook, where its food was taken to it: the animal recovered. A terrier dog burnt its right eye; it remained lying under a counter, avoiding light and heat, although habitually he kept close to the fire. It adopted a general treatment, rest, and abstinence from food. The local treatment consisted in licking the upper surface of the paw, to which he applied the wounded eye, again licking the paw when it became dry.

Cats also, when hurt, treat themselves by this simple method of continuous irrigation. M. Delaunay cites the case of a cat which

remained for sometime lying on the bank of a river ; also that of another cat which had the singular fortitude to remain for forty-eight hours under a jet of cold water.

Animals suffering from traumatic fever treat themselves by the continued application of cold, which M. Delaunay considers to be more certain than any of the other methods.

In view of these interesting facts, we are, he thinks, forced to admit that hygiene and therapeutics, as practised by animals, may, in the interests of psychology, be studied with advantage. He could go even further, and say that veterinary medicine, and perhaps human medicine, could gather from them some useful indications, precisely because they are prompted by instinct, which are efficacious in the preservation or the restoration of health.—*British Medical Journal*.

SHORT WEIGHT QUININE PILLS.—Prof. Albert B. Prescott, in the *Therapeutic Gazette*, February, 1883, contributes very much needed information on the subject of the variations of hydration in ordinary quinine sulphate.

Our readers are aware that analyses made by the *Medical News* of several quinine pills in market showed no adulteration or substitution, but simply short weight. This in itself is a great evil, and would justly excite a serious opposition to those dealers whose pills were shown by the analyses to be below the standard.

Professor Prescott's statement of the different degrees of hydration, shows a variation of "percentages of total water," from leading manufacturers, varying all the way from near 16 down to 9 ; and the salt which has been exposed or has been kept some time in dispensing bottles frequently opened, is often found with only five or six per cent. of water. Then it must be admitted that good sulphate of quinine of pharmacopœial standard,* as dispensed, will vary in concentration as follows :

Fresh from the can, 84 to 85 per cent. to 91 per cent. of anhydrous salt—an increase of 7 or 8 per cent. in degree of concentration.

In dispensing bottles, 84 or 85 per cent. to 91 per cent. of

*U.S. Ph. 1880 permits loss of 16, 18 p. c. of water at 212° F.

anhydrous salt—an increase of 12 or 13 per cent. in degree of concentration.

Bearing in mind three points, it is proper to give to those pharmacists charged with short-weight pills the benefit of the variability of concentration of quinine, rather than reject their products.

THE OCEAN CURE.—The cheapening of rates of passage by first-class Atlantic steamship, induces the *British Medical Journal* to call attention to the great benefits of these sea-voyages. The effect of the sun-light, and ocean air, exercise a wonderful alterative influence on the vital condition. Their effect is nowhere better shown than in certain forms of kidney irritation, and in congestion of the urinary passages, which will often, after having rendered a patient's life wretched for many months, disappear completely after a few weeks' voyage in the tropics. A patient who has been worn and exhausted by chronic inflammation of the mucous membrane of the lower bowel, left as a sequela of a dysenteric attack, will often get rapidly well from the day the vessel leaves the port. Of course this method of cure is not within the reach of many of our patients, but for those who are able its value is not overstated.

PAGET ON SCIENTIFIC PHYSICIANS AND POLITICIANS.—In an address delivered upon the Collective Investigation of Disease, before a branch of the British Medical Association (*British Medical Journal*, January 27), Sir James Paget said: "The list of questions sent out by the Committee indicates that we are not ashamed to confess our doubts on some of the most important things that come before us; that we are prepared to start confessedly ignorant on many points upon which we are supposed to have complete and final knowledge. I think that, in common with most scientific men, we may boast that this is rather rare; that there are large groups of men, and those much esteemed, who rarely express doubt on anything, and thereby command the assent of those who listen to them. Without expressing the smallest preference for one side more than the other, I would say that this is best to be found amongst politicians, in whose speeches we almost entirely miss the words which are most familiar to ourselves—"perhaps," "possibly," "I rather think," "I would venture to

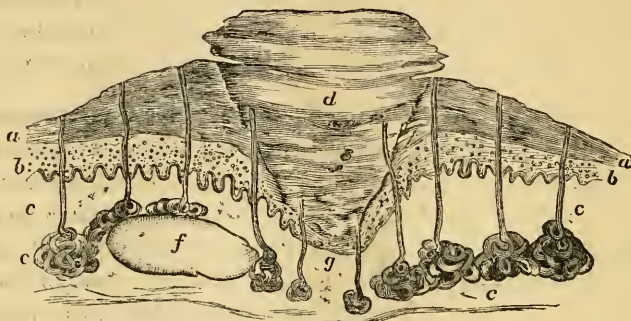
suggest." I have looked with much curiosity, not for the sake of acquiring political knowledge, but for the sake of comparing the political and the scientific mind, to see if in some of the best and most renowned speeches I could find one expression of the kind. Not one is there. We must therefore be content to put up with what may be regarded as a sort of unpopularity if we confess ourselves to beginning with doubts, in order that we may be more sure in proceeding towards knowledge; for there is no state of ignorance so hopeless, so profound, as that which cannot even doubt."

CONVALLARIA MAJALIS.—Dr. Sanson in his Lettsomian Lectures on the "Treatment of some of the forms of Valvular Disease of the Heart," says about *Convallaria Majalis*: "This is the well-known lily-of-the-valley, long employed by the Russian peasantry as a remedy for dropsy. Professor Sée has shown that it has an action much resembling that of *digitalis*. An extract of the whole plant is employed in doses of from five to eight grains, three times a day. In cases of mitral regurgitation with severe symptoms, it entirely relieved the cardiac distress, and manifesting a decided diuretic action, removed the dropsy. Professor Sée considers that it may be used in all forms of heart failure, for it has none of the nauseating effects of *digitalis*, nor does it exhaust the contractility of the heart and arteries. I have employed it as a substitute for *digitalis*, and am convinced of its action in promoting a stronger ventricular contraction; but I am not yet convinced of its superiority to *digitalis*.—*British Medical Journal*, January 27.

A USEFUL THING NOT PATENTED.—In exploration of the urethra it is necessary to have the parts well oiled. The syringe is used for injecting the oil by some; but finding nothing at hand in my examination room a few days ago but the small oil-can used for the lawn-mower, it was pressed into service, and its superiority at once demonstrated. The tube is small enough to be inserted deep into the urethra; it has propulsive power sufficient to send the oil into the bladder; it does not leak when upset; it is portable.

This discovery is freely offered to any aspiring young man who wants his name tied on to a new surgical device, provided only that he is a subscriber to this Journal.

THE ANATOMY OF THE COMMON CORN (CLAVUS).—We are indebted to the *Journal of Cutaneous and Venereal Diseases* for February for much instruction from its well stored pages. The following schematic drawing of a “corn” (*clavus*) is from that journal, occurring in the course of a review of Behrens’ *Lehrbuch der Hautkrankheiten* :



a is the stratum corneum, *b* the stratum Malpighii, *c* the corium, *d* the corn itself, *e* sweat glands, *g* atrophied papillæ and stratum Malpig., and *f* newly formed mucous bursa, which in a measure may be regarded as a protective organ. A glance at the cut shows why it is that the ordinary treatment of these pests is usually so inefficient.

HYSTERICAL BREAST.—We take the following particulars from a clinical lecture delivered by Prof. H. C. Wood at the Philadelphia University Hospital, and reported in the *Medical Times* for October 7 :

“The case (a woman twenty-four years of age) is one of importance, because it represents a class of cases which are not very rare, and which are often horribly misunderstood and wretchedly maltreated. There had been some talk of having this breast amputated, when really there is no organic trouble at all. * * * The diagnosis between this condition and organic tumor can almost always be made by paying attention to the following points: In the first place, in regard to tenderness, the pain is more marked from merely touching the part than it is from strong pressure. In organic tumor the pain is proportionally increased by pressure.

Again, the character of the swelling is an aid in diagnosis. It is a diffused swelling, and lacks limitation. It also varies much in size at different times. It can be seen at one time, and not at another. An organic tumor is persistent in form and hardness. In the neurotic breast the pain is very much affected by the weather and by fatigue. You notice that this lady has large, full eyes, with drooping eyelashes. Whenever you see these in the Anglo-Saxon race, especially in a female, you have a person of an hysterical temperament; and a neurotic element will enter into the diseases of such a person. * * * There is one form of neurotic affection of the breast which is not often alluded to in the books, and which often gives rise to a good deal of alarm. You know that at puberty, when the system is expanding from childhood to womanhood, the breasts swell. If the person be of a neurotic temperament, there frequently is a good deal of disturbance of the part, the breasts becoming swollen and very tender. If both breasts swell at the same time, and all the genital organs unfold themselves simultaneously, this condition is not so likely to occasion alarm; but in neurotic young girls there is often irregularity, so that while one breast remains unaffected, the other may suddenly grow hot, become swollen and exceedingly tender, developing into a condition very similar to, if not identical with, that of the neurotic breast. * * * I have in a number of instances seen the same condition in boys; for even in the male at puberty the breasts occasionally swell, and sometimes secrete a few drops of a serous fluid. These cases of neurotic breasts are usually quite amenable to treatment, but sometimes are very intractable. The treatment should be addressed to the local disorder, and also to the condition of the system. In many cases a galvanic current will rapidly bring relief. Why this is I do not know, any more than I know why it will relieve some cases of neuralgia. The method of application is by placing a large sponge connected with the positive pole over the breast, and allowing the patient to hold in the hand a small sponge connected with the negative pole. The current is then allowed to pass for twenty minutes steadily through the part. Great relief will often be experienced at once. When you obtain temporary relief after a few minutes' application, a repetition of the treatment is almost always followed in the course of two or three weeks.

by a permanent cure. The current should be of such strength that the patient can feel it, and that it will produce redness of the skin without causing pain. It should be applied daily for about fifteen or twenty minutes. The application of belladonna often affords relief. The treatment of the neurotic element is the same as you employ in other cases of nervousness with failure of nerve-power. You do all that you can to build up the strength and constitution of the patient. You accomplish this first by attention to hygiene, and in the second place by tonics, which you do not use if there are any signs of irritation of the gastro-intestinal canal. In many of these cases there is disorder of the intestinal tract. Do not use tonics in such a case. They are probably the worst abused of all drugs. A person is suffering from debility and disordered digestion, and he is immediately put on the use of tonics. This is like trying to put out a fire by pouring burning benzine on it. You not only waste your time, but you increase the gastro-intestinal trouble. Debility is not a disease; a cause for it can generally be found. If you remove the cause the debility will take care of itself. As there seems to be no trouble with the stomach and bowels in this patient, I shall give her arsenic and iron in combination with some bitter tonic. In the majority of these cases you will find the best treatment to be the so-called rest-treatment, which is a long process of rest, high feeding, and administration of tonics, with what may be called artificial exercise."—*Medical Times and Gazette*.

TWO CASES OF COLOTOMY.*—Although this operation is very frequently performed at the present time, it is not easy to obtain a description in the books which will serve the purpose of a useful guide to the surgeon who is about to undertake his first case of this kind. The best description in the English language is furnished by Allingham, so far as the writer is aware, and he is freely quoted by Bryant. A painstaking and accurate account is given by Koetzig.† Allingham's rules are: to make an incision beginning one and one-half inches to the left of the first spine below the last

*Read before the Surgical Section of the Suffolk District Medical Society, January 3, 1883.

†Lehrbuch der Speciellen Chirurgie.

rib, and running five inches obliquely downwards and forwards across the space between the last rib and the crest of the ilium. Some writers content themselves with saying that the middle of the incision should correspond with the highest point of the *crista ilei*. The length of the incision is occasionally given as three inches. This is about the length of that drawn in Bourger's plates of Amussat's operation. Packard, in the American edition of Holmes, considers this length sufficient. It is custom, he informs me, to begin the incision at the depression made by the edge of the quadratus lumborum muscles. Inasmuch as the bowel lies at the edge of the muscle, this would bring the objective point near the beginning of the preliminary incision and not under the centre, as it should be. Moreover, some anatomists affirm that the depression supposed to be caused by the quadratus is really produced by other muscles. Allingham calls attention to the fact that it is sometimes quite difficult to find the bowel, and gives us a guide the direction to draw a line from the anterior to the posterior spinous processes, to extend a line vertically from a point one-half inch behind the centre of this line, and it will be found to lie directly over the bowel. The bowel may be opened in the groin according to Littré's method, and modern surgery has deprived this operation of its principal danger, the opening of the peritonæum.

Another method of getting at the colon, described by Fine, consists in making a vertical incision from the eleventh rib to the crest of the ilium through the abdominal walls and opening the colon within the peritonæum.

The precaution sometimes given not to open the bowel in these operations until it has become glued to the lips of the incision seems hardly necessary.

The first case was that of a German girl, twenty-three years of age, who entered the Massachusetts General Hospital with symptoms of disease of the rectum of one year's standing. She was suffering great pain in defecation, and a digital examination showed the lower rectum to be almost completely obstructed by an indurated growth. The patient was etherized a few days later, and the constriction relieved by an incision which completely divided all tissues between the anus and coccyx, including the lining of the bowel and skin. Great relief followed, but in a week or two the

symptoms of stricture returned, and it was found that the disease had already extended above the incision. Colotomy was performed May 24th, Allingham's directions being carefully followed. The bowel was found without difficulty, was caught up by two loops of thread, and the incision stitched together around it. The colon was then opened, and after a very abundant faecal discharge had taken place was stitched to the edges of the opening left for that purpose. The operation was done with antiseptic precautions, as a slight attack of erysipelas had followed the previous operation. Drainage tubes were inserted at each end of the incision, and a dressing of oakum followed in carbolized gauze was placed over the wound and changed as often as necessary. Except a slight erysipelatous blush lasting a few days recovery was uninterrupted, and the patient was discharged from the hospital June 24th, with the wound entirely healed. There was no inconvenience from leakage from the bowel, although occasionally a small amount of faecal matter escaped with the morbid discharges from the rectum. There were two natural movements from the bowel daily, and there was complete relief from the previous suffering. During the summer the patient reported herself at the hospital. The movements continued to be well-formed and regular. The disease continued to progress, and she died on January 1st, having been obliged to resort to opiates only a few days before death.

Colotomy was performed in the second case for congenital absence of the rectum. The child, a patient of Dr. W. A. Dunn, was born two days before, and all attempts to open the bowel through the anal orifice were unavailing. The so-called paradox of M. Huguier occurring to my mind, namely, that in infants the sigmoid flexure is in the *right* groin,* I selected that position, found the distended bowel without difficulty, and evacuated a large amount of meconium, relieving the enormously distended abdomen. All symptoms were speedily relieved, the child nursed well, and the wound healed without any indications of unusual inflammation. A progressive emaciation soon set in, which continued in spite of the baby's ability to nurse well, and death occurred on the fourteenth day. Unfortunately, Dr. Dunn was unable to procure an autopsy

*American edition, Holmes' System of Surgery, vol. III., p. 850.

and settle the point where the ascending or descending colon had been opened. Taking into consideration the fact that it has been shown that the position of the sigmoid flexure described by Huguier is found in a comparative small percentage of cases, and that when the ascending colon was opened in this instance, although the rapid and abundant discharge of feces made it seem probable at the time of the operation that the opening had been made near the fundus of the cul-de-sac.

In looking up the literature of this subject after the operation, the proposition of McLeod struck me most favorably, and that is, to perform abdominal section when the rectum is wanting, free the end of the bowel from its connections, and, having emptied it, bring it down and stitch it to the anal opening. This is certainly a severe operation, but it seems to me preferable to all other alternatives.

The treatment of cancer of the rectum deserves a word in connection with the case first reported. In this neighborhood it has been the custom to adopt chiefly an expectant method, the stricture, if marked, being relieved by the passage of bougies; in England colotomy is almost universal; in Germany extirpation is largely resorted to. A linear division of the stricture, which I have performed in a number of cases, brings only temporary relief. A radical operation can, of course, only be attempted with reasonable hope of success in the earlier stages of the disease, but it is important to recognize the fact that the terrible suffering peculiar to cancer in this locality can be greatly relieved by an opening in the bowel at some point above.—*J. Collins Warren, M.D., in Boston Medical and Surgical Journal.*

PERIOD OF INFECTIVENESS IN SCARLET FEVER.—Dr. John S. Main (*Brit. Med. Jour.*, Dec. 1882, p. 1091) pronounces a patient recovering from scarlet fever to be free from infection—(a) when desquamation has ceased, and a full week allowed to expire besides; (b) when the throat symptoms have abated, and all lesions of the mucous membrane are healed; (c) when the body-clothing and surroundings of the patient have been thoroughly disinfected.—*Richard Neale, M.D., in London Med. Record.*

SALICYLATE OF SODA IN SCARLATINA.—Dr. James Couldrey, in the *Lancet*, Dec. 1882, p. 1064, writes to say what great benefit seven cases of scarlatina have received by the prompt administration of salicylate of soda; the dose given was fifteen grains every two hours until the ringing in the ears was produced, and then every four hours until the end of the first week. For children the dose was one grain of the salicylate for every year of age of the patient. [A reference to Section 81:6 of the *Med. Digest* will show that the value of salicylic acid and salicylate of soda have long been advocated by more than one observer.—*Rep.*]

HYSTERIA IN BOYS.—Charcot (*Le Progrès Méd.*, No. 51, 1882) thinks hysteria relatively common in boys about the age of twelve or thirteen. Such cases present more or less of the characteristic phenomena met with in women—hemi-analgesia, hysterogenic points, amblyopia, and epileptiform attacks with marked opisthotonos. In such cases the prognosis is usually good, and the attacks are usually less obstinate than in girls. In the treatment, isolation from the influence of too solicitous parents is essential. He relates the case of a Jewish lad, who only recovered after isolation was obtained. In addition, he recommends the douche every other day, and tonics.

PHTHISIS: ITS ETIOLOGY AND TREATMENT.—Dr. Wm. Johnston, in the *Lancet*, December, 1882, p. 1003, suggests a form of treatment of phthisis, based on the grounds that tuberculosis is a parasitic disease of the internal organs, and that the parasite is a bacillus distinguished by its microphytic and other features. It is suggested that by the absorption of medicinal agents, such as carbolic acid, salicin, &c., one may be able to destroy this germ, either by acting on the skin by means of carbolic acid in intimate union with the vapor of water at a high temperature, or else by giving salicin internally, which is decomposed into several compound acids during its passage through the body.

DR. BATTEY'S PRIVATE HOSPITAL.—We are pleased to announce that the distinguished specialist, Dr. Battey, has established a private infirmary, for the treatment of diseases of women at his home in Rome, Georgia

His private infirmary is situated two squares from the depot, opposite his residence on South street, and is under the daily supervision of Mrs. Battey. It occupies a series of two-story frame cottages, connected together by a covered veranda. Each patient has her separate room, carpeted, furnished in solid walnut and provided with fire.

Neither male patients nor children are admitted, and only ladies with diseases peculiar to their sex. Good social standing is required.

A separate surgical ward, provided with the best appliances for antiseptic ovariotomy, gives ample facilities for conducting surgical cases to a successful issue.

Dr. Battey is a most conservative and safe gynecologist, being a specialist in the higher sense of the word, and is justly reaping the reward of a studious and honorable career.

ATROPIA-POISONING—MORPHIA AS ANTIDOTE.—Dr. J. B. Cox, reports the following case to the *Medical Times*:

MR. EDITOR:—I take the liberty of calling your attention to a case of atropine-poisoning occurring in the person of a physician near Shannon, Mississippi, and treated by Dr. Carothers of that place.

He had swallowed by mistake on an empty stomach one grain by weight of atropine. He was not aware of his mistake until symptoms of atropine-poisoning occurred, consisting of dilated pupils, dry and hot skin, dry throat, and drawling and incoherent speech, followed by convulsions. Dr. Carothers injected hypodermically sixteen to eighteen grains of morphia, and under its influence the patient recovered. There were no symptoms of narcotism from the use of the morphia, which would seem to show that the antagonism between these drugs is mutual. The patient, not having been addicted to the opium habit, the amount of morphia injected would have produced death had there been no antagonism by the atropine. The limited protective influence of atropine in opium-poisoning is clearly established: do not the foregoing facts tend to establish the converse?—*Philadelphia Medical Times*.

CASE OF INTERSTITIAL TUBO-GESTATION.—Dr. Henry Habgood describes the case of a married woman, aged thirty-five, who died

with all the symptoms of internal hæmorrhage, in the eleventh week of pregnancy. "At the necropsy there were about five pints of clotted blood in the pelvic and abdominal cavities. On turning this out, the source of the hæmorrhage proved to be a sac, formed by the uterine portion of the left Fallopian tube and the wall of the uterus, which had grown outwardly to about the size of a walnut, and then ruptured anteriorly. Chorion villi were distinctly visible in the sac. The opening of the tube into the sac had become obliterated. There was evidence of a previous partial rupture, in the shape of a small hæmatocoele, on the posterior aspect of the sac. The fœtus had escaped into the abdominal cavity, and was unfortunately lost. The left ovary was closely attached to the left side of the uterus by old bands of lymph, and contained several cysts. The right ovary was normal, and contained a corpus luteum. The uterus was enlarged, and its lining membrane was red and thickened, forming a distinct decidua, that could be easily detached. The bladder was healthy, but contained no urine. The abdominal organs were healthy, but very anæmic.

"With regard to the cause of the arrest of the ovum in that particular spot, I may remark that nothing existed in the Fallopian tube or uterus, in the shape of polypus or fibroid, to cause obstruction, but that there were plenty of adhesions on the left side, matting the uterus, Fallopian tube and ovary together, altering their relative positions, and, possibly, causing obstruction. Yet the presence of a corpus luteum in the right ovary, coupled with the cystic condition of the left, would point to the theory of transmigration of the ovum as being the most probable explanation of the phenomenon."—*British Medical Journal*.

CEREBRAL DYSPEPSIA.—By John S. Main, M. D. The author strongly insists on the purely cerebral origin of many forms of dyspepsia, where the patient is neither overindulgent, nor intemperate, nor addicted to hurrying over meals, nor accustomed to eat coarse or unwholesome food. The cerebral form of dyspepsia is well seen, in many cases, where a healthy man, with a good appetite suddenly receives bad news when sitting down to a meal. "But perhaps, of all conditions acting on the brain in this manner, and through the brain on the stomach, no one is more injurious, or

more jarring to the cerebral elements, than uncertainty, and the worry caused by the same, more particularly in preternaturally, irritable subjects. In fact, it is in connection with this same worry that the form of dyspepsia I have at present under consideration most frequently occurs. The mind, in such cases, preys upon itself; the cerebral elements seem to get jarred and out of gear; and with this condition the stomach sympathizes. But in addition to this worry the habitual practice of calling into action the "reserve fund" of the cerebrum, as already mentioned, will bring about the same consequences—namely, cerebral fatigue and exhaustion, indicated chiefly by preternatural irritability; this condition, sooner or later, telling upon the digestive organs. Having said this, it is almost unnecessary to add, that such cases are most commonly met with amongst those who are engaged in the hottest part of the 'battle of life,' or 'struggle for existence;' and again, amongst these, chiefly those whose business or profession leads to much anxiety, uncertainty, or overstretching of the mental powers. In over-aspiring, over-ambitious natures 'hope deferred' may bring about the same results; as, according to the biblical expression, "it maketh the heart sick." My attention was drawn to several cases of dyspepsia, connected with one or other of these conditions, some time ago; and what made me more strong in my view of these cases being cerebral, and not stomachic at all in their origin, was their obstinacy under all forms of natural treatment. Latterly I have found that the only treatment capable of doing these cases any permanent good, is a change, in the wide sense of the term—a relaxation from business or study; and as regards medicines, not such as are meant to act on the stomach directly, but those meant to act on the cerebrum. Amongst these, I have found the most useful to be the bromide of ammonium, or bromide of potassium—preferably the former—given in a sufficient dose at bed-time, to secure a good night's sleep, this being often very indifferent, and so tending to complicate the case; and, combined with this, to be taken three or four times during the day, such medicines as are known to have a building up effect on the nervous system. Amongst these, the most useful being phosphorus, or the hypophosphites, and cod-liver oil. Arsenic and quinine are often also useful, and a generous diet is always indicated. Unless the

stomach has passed into a state of disease (which it may do, if overtasked when in this weakened state), any of these medicines are generally well borne. It will be well to bear in mind, however, that if the mucous membrane of the stomach be in a state of irritation, quinine, arsenic, phosphorus, the hypophosphites, and sometimes even cod-liver oil, are generally inadmissible."—*British Medical Journal*.

INDICATIONS FOR THE USE OF DIFFERENT KINDS OF ELECTRICITY.—To recognize the differential indications is one of the most difficult things in medicine. We have, says Dr. A. D. Rockwell, in the *New York Medical Journal*, February 3, 1883, galvanic, faradic and franklinic, or static electricity, each one of which differs from the others in its therapeutical properties. In hemiplegia, where there exists an exalted electro-muscular contractility, the galvanic current is indicated. When we wish to directly affect the central nervous system the constant current is alone applicable. As a general rule, it will be found that in neuralgia, where firm pressure over the affected nerves aggravates the pain, the galvanic current is indicated, while when the opposite condition obtains, the faradic current will prove more useful. In what we call "general debility," the faradic current is indicated. Asthenopia, accompanied by hyperæsthesia of the retina and ciliary nerves, seems to demand the faradic current; as is also the case in diphtheritic paralysis. The so-called spinal irritation or spinal neuralgia calls exclusively for galvanism, as well as in sequelæ of cerebro-spinal meningitis; also will it oftentimes afford much relief in exophthalmic goitre.

For the restoration of the lost senses of taste and smell, galvanism succeeds when faradism fails. So also in skin diseases, where electricity is of service, the galvanic current is the one indicated. For herpes zoster, in electro-surgery and in the treatment of erectile tumors, galvanism reigns supreme. It is to be preferred as a foeticide in extra-uterine pregnancy. In sthenic chorea it is indicated, while in the asthenic form faradism must be used. The same rules will guide in amenorrhœa. The pain of muscular rheumatism will be relieved sooner by franklinization than by either of the others, and its use is more particularly indicated in pain confined to no special nerve trunks, dull and aching in character, and with no tenderness on pressure. Study first dynamic electricity, and then go to franklinism.—*Philadelphia Medical and Surgical Reporter*.

THE DEFEAT OF PUBLIC HEALTH LEGISLATION.

We had reason latterly to anticipate the defeat of the bill to promote the efficiency of the North Carolina Board of Health. A very decided majority in the Senate on the 25th inst.—7 for and 28 against the bill—tells the story of the character of the opposition.

The course of the argument of the opponents of the bill, if the *News and Observer* correctly reports it, would hardly have convinced any one, except such Senators as those who regard Boards of Health as schemes to put money in the pockets of the doctors.

One Senator opposed the bill because the analyses of water (for the sanitary information of citizens) was done at the expense of the farmer. That is, an Agricultural Department sustained by the fees of the manufacturers of fertilizers, and which was required by the law to undertake analyses for all citizens (and numbers of farmers had availed themselves of this privilege), was adding an additional tax to the farmer. If there had been any other class of citizens with as many votes as the farmers, doubtless the bill would have been opposed in their interest, by the learned Senator

Another Senator opposed the bill “because of too much power given the county superintendent in abating nuisances.” We are not surprised at the opposition to the abatement of nuisances on the part of any member of this Assembly, or the one previous, when we look at the shameful state of things in the capitol. So far from having sanitary rules of any kind, shocking disregard of ordinary cleanliness is a marked feature there. There are no necessary conveniences belonging to the capitol, members relying upon the hotels, except that there is a large wash-tub kept behind a screen, where one may retire in case of an active state of the kidneys. Men who could witness daily such improprieties, could hardly entertain the mildest laws against the abatement of nuisances.

Another point which seems to have weighed in the discussion was the unsatisfactory relations between the Superintendent of Health of Mecklenburg county and the County Commissioners. The only remedy that seemed at all adequate to the enormity of his misdoing was the repeal of the whole law.

So then, the calculation by the State Board of Health, that it would work bravely, and that time would prove the great value of the work, and that the law-makers would come to the relief of a struggling Board, was only the vain delusion of too sanguine friends.

After six years of unremitting service, we find ourselves so far in advance of public intelligence, that we have no substantial following; and we must relinquish all the labor, and all the money spent, and give up our task as fruitless.

If the Legislature is satisfied with its record, we are satisfied with ours, and we are willing to leave the future to decide how wisely and unselfishly we have performed our trust.

PYROGALLIC ACID IN PHAGEDÆNA.

From the *Union Medicale*, January 4, 1883, we learn that M. Vidal, Surgeon to the St. Louis, thus concludes a paper which he read at the Académie de Médecine, "On the Treatment of Phagedæna of Simple Chancre by Pyrogallol": 1. By destroying the virulence of simple chancre, it arrests phagedænisism and rapidly transforms it into an ordinary sore. 2. Only causing very slight pain for some minutes, limiting its caustic action almost exclusively to the diseased tissues, and easy of application to all the invaded parts. pyrogallol, incorporated with an ointment mixed with an inert powder in the proportion of one-fifth, has proved to be the best topical application to simple chancre and phagedæna. 3. It may be applied over large phagedænic ulcerations without danger accruing from its absorption. Although so remarkable in its efficacy in the phagedænisism of simple (invading) chancre, it has no special action on the phagedænisism of syphilitic ulcerations (tertiary phagedænisism).—*Phil. Med. and Surg. Journal*.

OBITUARY.

JOHN G. RIVES, M. D.

Mr. President and Gentlemen of the Medical Society of Edgecombe:—At an informal meeting of this body, in January last, I was asked to notice the death of our late fellow, Dr. John G. Rives, and forward the same for publication to the NORTH CAROLINA MEDICAL JOURNAL.

Again the relentless hand of death has visited our ranks and snatched from our midst a worthy co-laborer in the cause of hygiene and therapeutics. So short has been the time since it was our melancholy duty to chronicle the death of that good man and charitable physician, Dr. A. H. MacNair; and now we are called together to say "fit words" of sympathy and respect for our late confrere, Dr. John G. Rives, who died of an apoplectic seizure on Saturday, the 16th of December last, while in the attitude of prayer closing the services of the day of the "Primitive Baptist Church," of which denomination he was a devoted member.

Dr. Rives was born in Pitt county, North Carolina, on the 10th of July, 1818. In early manhood he taught a classical school, which was given up after two years for the more genial and inviting profession of medicine.

Graduating at the University of New York in the spring of 1845, he located in Edgecombe county, about sixteen miles north of Tarborough, in a densely settled neighborhood, where much wealth and intelligence prevailed. Here he practised that generous calling to which we have the honor and pleasure to belong, with credit to himself and profit to his patrons, until death closed his career a few weeks since. "*Requiescat in pace.*"

The subject of this sketch was twice married, and leaves a widow and three children (sons) to emulate his many virtues and commemorate his Christian life.

This little tribute is but just to one whom we had the good fortune to know well. P.

Tarborough, N. C., February —, 1883.

BOOKS AND PAMPHLETS RECEIVED.

Scrofulous Disease of Joints Complicating Phthisis. By Robert Battey, M. D., Rome, Ga.

The Spinal Nerves. By A. H. P. Leaf, M. D. F. B. Connor, Jr., Nos. 68 and 70 Court Street, Brooklyn, N. Y.

The Physiology of Alcoholics. An Address by Wm. B. Carpenter, M. D., LL. D., F. R. S. New York: National Temperance Society and Publication House, 58 Reade Street. 1883.

The Treatment of Uterine Diseases. By Means of the Hot-Air Bath and Hot-Vaginal Douche. By Allan Mott-Ring, A.M., M.D. Boston: A. Williams & Co., Old Corner Bookstore. 1882.

Transactions of the N. H. Medical Society at its Ninety-Second Annual Session, Held at Concord, N. H., June, 1882. Concord: Printed for the Society, by Evans, Sleeper & Woodbury. 1882

The School of Salernum. An Historical Sketch of Mediæval Medicine. By H. E. Handerson, A.M., M.D. Read before the Medical Society of the County of New York, February 25, 1878. New York. 1883.

Third Annual Report of the State Board of Health of South Carolina for the Fiscal Year Ending October 31. 1882. To the Legislature of South Carolina. Columbia, S. C.: Charles A. Calvo, Jr, State Printer. 1882.

First Report of the Board of Health, to the Mayor and Council of the City of Macon, Ga. By J. Emmett Blackshear, M.D., Chairman. For the Year 1882. Macon, Ga.: J. W. Burke & Co., Printers and Binders. 1883.

A Dictionary of Medicine including General Pathology, General Therapeutics, Hygiene, and the Diseases Peculiar to Women and Children. By Various Writers. Edited by Richard Quain, M.D., F.R.S. New York: D. Appleton & Co., 1, 3 and 5 Bond Street. 1883.

Scrofula and its Gland Diseases. An Introduction to the General Pathology of Scrofula, with an Account of the Histology, Diagnosis and Treatment of its Glandular Affections. By Frederick Treve, F.R.C.S., Eng. Philadelphia: Henry C. Lea's Son & Co. 1883.

Fourth Annual Report of the State Board of Health, Lunacy, and Charity of Massachusetts, to which is added a Statistical Appendix, and a Manual of Laws and Decisions. January, 1883. Boston: Wright and Potter Printing Co., State Printers, No. 18 Post Office Square. 1883.

Summary of the Results of Fifteen Cases of Battey's Operation. By Robert Battey, M.D., Rome, Ga. Read in the Section of Obstetric Medicine at the Annual Meeting of the British Medical Association in Cork, August, 1879. Reprinted from the British Medical Journal of April 3d, 1880.

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THOMAS F. WOOD, M. D., Editor.

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ORIGINAL COMMUNICATIONS.

ON FORCED ALIMENTATION AND WASHING OUT THE STOMACH.*

By Professor DUJARDIN-BEAUMETZ, Paris, France.

Washing out the stomach by a process I am about to describe, is a method which gives in many gastric affections astonishing results, and I am to-day one of the most strenuous partisans of this practice. In the wards of my hospital you may see daily beneficial results, and indeed sometimes veritable resurrections obtained thereby. If I express, to-day, my opinion on this subject with so much positiveness, it is because my first tentatives, made immediately subsequent to the labors of Küssmaul, were not satisfactory, but now, thanks to the discovery of Faucher all inconveniences have been removed and we are enabled to utilize the method to the greatest advantage.

I have been reproached for changing my mind, but the science of therapeutics, gentlemen, is not something absolutely fixed; progress

*From the forthcoming third edition of *Leçons de Clinique Therapeutique*, and communicated by the Professor,

has been made and is being made, and I am free to welcome the results of careful experimentation ; and if I have had occasion to alter my opinion about this matter of washing out the stomach, it is because I have tried the new methods and have found them practical and advantageous.

The idea of removing liquids from the stomach by a mechanical process is of French origin, and must be credited to Casimir Renault; another Frenchman, Blatin, in 1832 taught the utility of washings of the stomach. It must be admitted, however, that it was Küssmaul who first systematized this practice and gave it a definite place among the resources of our profession.

It was in 1867, before the Congress of German physicians, held at Frankfort on the Main, that Küssmaul first made known the results of his clinical experience with the stomach tube. He employed the ancient œsophageal sound, to which he adopted a suction and force syringe, and it was by virtue of this apparatus called stomach pump, that liquids were injected into, or withdrawn from the stomach. The inconveniences of this instrument were these : the introduction of a rigid tube was painful, moreover the extremity of the sound irritated the walls of the stomach, so after several trials of Küssmaul's pump, I abandoned this method. But the discovery which Faucher made in 1879, and almost at the same time, Oser, in Germany, compelled me to modify my opinion.

This discovery consisted in the passage of a soft and flexible tube into the cavity of the stomach, and in the application of the physical theory of the siphon to the introduction into and removal of liquids from this organ. From this date I have multiplied the applications of the stomach siphon, and one of my pupils, Dr. Joseph Lafage has comprised in his excellent thesis on the treatment of dilatation of the stomach by "lavation," a great number of observations, and for 10 years past I have so frequently practiced stomach-washing, and with so much success, that I have had reason to felicitate myself for the part which I have taken.

How is this method of lavation of the stomach performed ? The answer to this question involves a description of the instrument used, the manner of using it, and the liquids employed for cleansing the stomach.

The tube Faucher, is of flexible caoutchouc, one metre and a

half long [nearly five feet], with an index on one side, so that you may know the depth in centimetres to which the tube has penetrated. The tubes are of three sizes, No. 1, 2 and 3, the diameter of the first being 8 millimetres, the second, ten millimetres, the third, 12 millimetres; to these tubes is attached a funnel.

In purchasing a tube Faucher, you should select one as smooth as possible and with some degree of stiffness, so that you may easily be able to make it enter the stomach by successive pushes, (such tubes as Debove has recently caused to be made); as for the funnel it should be of glass, so that you may watch the descent of the liquid.

These tubes have lately undergone great improvements, without yet fully attaining the ideal of a hollow and resisting, yet quite supple tube. One of my colleagues, Audhoui, has constructed a stomach tube on the principle of the double trocar, (two flexible siphons, glued together), while my friend Debove makes two parts of the siphon, and introduces the œsophageal part by the aid of a stylet, which gives stiffness and resistance to it. These improvements have not come into general use, in fact the simple tube may, by skillful management, give you all the results which you desire.

I advise you, when you attempt for the first time, to introduce the siphon, to use tube No. 1, (taking care to select one with the requisite degree of stiffness); then when your patient is used to a tube of this size, you can easily succeed with a larger one.

The introduction of this instrument can readily be effected in this manner. Place yourself in front of your patient. Make him open widely the mouth and protrude the tongue. Pass in the tube over the back of the tongue, and when you have the extremity well in the throat, as far as the base of the tongue, make the patient swallow, and while the movements of deglutition are being performed, push on your instrument into the œsophagus. When once you have gained the first part of the œsophagus, you can easily carry onward the tube, by a succession of pushes, and with considerable rapidity.

Some have proposed to render the introduction of the tube easier by greasing it with oil, vaseline, or glycerine. Fatty substances leave a disagreeable taste in the mouth; I am myself in the habit of simply dipping the tube in Vichy water, or what is better still, in milk.

As soon as you have made the tube penetrate to the proper depth, as indicated by the salient index on the parietes of the siphon, you annex the funnel, fill it rapidly with liquid ; then, as soon as you see the liquid disappear in the lower portion of the funnel, you lower it instantly, converting the tube into a siphon, and causing the liquid contents of the stomach to flow into the pail which you have placed between the feet of the patient.

During the introduction of the tube some dyspnœa is manifested on the part of the patient. The eyes are injected, the face turns red, and the patient pretends that he cannot breathe. Insist then on the patient making full respirations during the operation.

To the dyspnœa we must add nausea and vomiting among the unpleasant accompaniments of the operation ; this nausea is manifested as soon as the tube enters the œsophagus, or when it reaches the stomach. In some very sensitive individuals it is impossible to penetrate to the back of the throat without inducing vomiting. You can readily calm these reflexes by bromide of potassium ; in fact, it is my custom to give bromide internally, and apply it locally three or four days before attempting the first lavation of the stomach. It is more difficult to avoid the irritation provoked by the pressure of the tube in the stomach. The vomiting, however, which ensues from this cause, is more infrequent and can generally be prevented by introducing immediately into the gastric cavity a little water. In this way you will separate the walls of the stomach from the end of the tube and will avoid irritating the organ. The tolerance of the pharynx of the œsophagus and of the stomach is readily obtained, and I can affirm that always after three or four sittings ; patients support without any inconvenience the presence of the tube. In a very short time they can effect the introduction of the tube themselves, and in the case of the greater part of my patients, both in private practice and in the hospital, I leave to the patient himself, after the fourth sitting, the entire performance of the operation. At the same time there are two circumstances which often present an insurmountable obstacle to the introduction of the siphon. These are, first of all, œsophægeal spasms in certain hysterical females, spasms which it is often difficult to overcome, even with a rigid instrument ; secondly, ulcerations of the epiglottis and the posterior part of the larynx, which

frequently render the passage of the tube very painful. With the exception of cases of this sort and such mechanical obstacles as cancer of the œsophagus, I have never found patients rebellious to the introduction of the stomach tube.

What kind of liquids and what quantities is it advisable to introduce? Ordinarily we make use of some alkaline water, such as Vichy, or Vals; or it may be plain water, with $\frac{1}{2}$ dram to the quart of bicarb. soda. I sometimes use, after the German practice, water containing $1\frac{1}{2}$ drams to the quart of Glauber's salt. In certain cases it is necessary not only to wash out the stomach, but also to disinfect it. In other cases it is necessary to alleviate cramps and pain seated in the stomach; in other cases there are hemorrhagic tendencies to combat; thence different medicated solutions are indicated. Among the antiseptic liquids I particularize resorcine and boracic acid. Andeer is very fond of resorcine, and I have myself made numerous trials of this medicinal agent in chronic gastritis. Solutions of resorcine, as dilute as 1 per cent., are irritating, but they procure a complete disinfection of the contents of the stomach; therefore in using this medicament I take care to make the solution very weak (i. e., not more than five grammes to the quart). Boracic acid in the same proportion is also an excellent disinfectant. For the pain in the stomach the best solution to employ is the milk of bismuth. To a pint of water add five drams of the sub nitrate of bismuth; stir constantly before introducing this mixture into the stomach, and when you have caused it to enter the gastric cavity, let it remain there for several minutes, that the bismuth may have time to become deposited in thin layers over the mucous membrane. As for the hemorrhages, the best remedy with which to combat them is a weak solution of per-chloride of iron; a tablespoonful of the liquor fer. perchlorid. to the quart of water.

As for the quantity of liquid to use, this depends on the degree of dilatation and on the tolerance of the stomach. Some patients will bear two, three, four, and even five quarts; in the case of others a pint even will induce efforts at vomiting. You will then have to determine by trial the quantity which the patient will tolerate. However sensitive may be the patient's stomach, it is a good rule to continue the washing process, till the liquid which

issues from the buccal end of the siphon is perfectly limpid and clear.

There is generally little difficulty attending the removal of liquid by the siphon ; it is possible, however, that some solid particles of food in the stomach may get impacted in the eyes of the instrument so as to stop them up. You can generally clear these out by letting a little more liquid run through the tube into the stomach. In other cases (especially where there is great dilatation) your tube may bend on itself so that its lower extremity is applied to the upper part of the stomach ; this may happen in ordinary practice from having introduced the sound too deeply. In these circumstances the siphon fails to work, for obvious reasons. You have only to withdraw the tube a few inches to overcome the bend and bring the open end in contact with the liquid. You can aid the evacuation of the stomach by pressure over the abdomen, and by making the patient cough, thus obtaining the expulsive contractions of the diaphragm.

Is the siphon sufficient in all cases of dilatation of the stomach ? Yes, in the immense majority of cases. When, however, the dilatation is enormous, and the stomach is full of putrid liquids, as sometimes happens in cancer of the pylorus, it is necessary, in order to effect thorough cleansing, to employ the stomach pump, which injects the detergent solution with more force, and enables it better to reach all parts of the stomach. I am in the habit of using the Collin pump in these circumstances.

To wash out the stomach and disinfect its contents, to apply suitable medicated dressings—such are the results which you may obtain from the siphon. But this is not all. You can by this method feed the patient and practice what Debove calls *superalimentation*, what Mesnet has denominated *artificial alimentation*, and what I designate under the vulgar term, “*gavage*” (forced-feeding). It was Debove who first conceived the happy idea of applying the tube of Faucher to the alimentation of patients. The results which we have together obtained have stimulated us to continue our first essays, and since the first communication of Debove, in November 1881, to the Medical Society of the Hospitals, this method continued to undergo improvements. Debove was the first one, moreover, to make use of meat in the form of powder in

this forced alimentation, and to obtain good results from this practice. Formerly we employed a mixture of raw meat and eggs, beat up in milk, but despite all the care that was taken in mincing this raw meat, the mixture was far from being homogeneous, and quite often particles of meat in suspension would stop up the tube, and prevent the further descent of the liquid food ; and it was found necessary in these cases to use tubes of pretty large diameter. At the present day we get rid of these inconveniences by using alimentary powders. Of what do these powders consist ? They are of two kinds : powdered meat and farinaceous substances cooked and reduced to a fine powder. The powder of meat is obtained by drying the minced fibre of meat and raising the temperature to 120° C. ; then reducing it to an extremely fine powder. At the present time, since our communications on the subject, a great number of manufacturers fabricate these meat powders, and you will find them in commerce under the denominations of powders of pure meat and powders of the fillet of beef. The first, which are composed of horse flesh (a kind of meat, by the way, very nourishing), are of gray color, and their odor recalls that of the liver of the fox ; these are the least expensive. The second, whose price is much higher, for it takes 6 kilogrammes of fresh meat to obtain one of the powder, are of reddish color, and have the odor of roast beef. Both are reduced to an almost impalpable powder, and it is this very finely pulverized condition which, by enabling each molecule of meat to be attacked on all sides by the gastric juice, explains to us how it has been possible with this method to cause such enormous quantities of these powders to be absorbed. We find in this fact a direct illustration of what I said to you in one of my previous chapters, in reference to the influence of the molecular state of bodies on their digestibility. We find also here another confirmation of the experiments of Scheff, which go to show that meat is one of the best peptogenous substances ; in fact, under the influence of these powders of meat, you will see stomachs the most inactive and feeble recover their functions and the appetite return.

The farinaceous powder consists of lentils, which furnish a flour of a very nourishing and highly azotized character. These farinas were originally used in their raw state, then Debove, having found

that cooking augments their digestive properties, caused them to be cooked before being reduced to powder, and it is under this form of farina of lentils cooked that we generally administer it.

Tanret has advised to cause the lentils to germinate before using them, and Perret has made the powder out of malted lentils. Germination, in fact, favors in part the transformation of feculent matters, and in this way aids their digestion. You can in the same way utilize the farina of Indian corn, which is very rich in fatty materials, and the mixture of this powder with the powder of meat, either in equal proportions or as two parts of meat to one of farina, constitutes an alimentary product very acceptable to even the most difficult patients.

These powders may be mixed in a variety of ways, as may be seen by consulting Robins' thesis.

In practising forced feeding these alimentary powders were incorporated with water or milk, in the proportion of about 200 grammes (between six and seven ounces) to a quart of the vehicle. In mixing the ingredients, be careful to add the milk little by little, so as to make first of all a homogeneous paste with the powder, which slowly undergoes solution in the milk as it is added, and you get in this way a liquid having the consistence and the aspect of chocolate, and which is ready for use.

You understand then the advantages which these meat powders have over the older preparations made from raw meat; they are much more nourishing in a smaller volume, and much more digestible, and there is no danger of conveying tænia through them to your patient. You can then administer to your patients in thin tapioca gruel, or broth, one or two spoonfuls of powder of cooked beef, and a spoonful of farina of lentils, cooked or malted, or if you please torrefied corn meal. Gruels made in this way are very agreeable to the taste, and are well borne.

These are not the only advantages of these powders. They have enabled me to simplify very much the operative procedure when it is desired only to practice artificial feeding, and when washing out the stomach may be omitted. We see, in fact, that while in the case of patients affected with gastric disorders little or no opposition is made to the introduction of the tube of Faucher, it is not the same with persons not suffering from serious trouble of the

digestion, in whose case forced alimentation is deemed necessary. They are apt to be frightened at the size and length of the siphon, and to such an extent, that thus far the method of Debove has not been popular in the *private practice* of physicians, however successfully it has been employed in the hospitals.

I have therefore attempted to render the operation less painful, and this is the result of my endeavor. After having verified the fact first taught by Ortille, that in order to introduce liquid substances into the stomach all that is necessary is to place them in the upper part of the œsophagus, I have considerably shortened the tube Faucher, and I have given it a length of only twenty centimetres. Then since the alimentary mixture made with meat and farina is thin and diffuent enough to traverse quite narrow tubes, I have diminished considerably the diameter of the tube, which is now only about the size of a large sized urethral sound. In fine, I have flattened the pharyngeal extremity of the tube so as to render its introduction easier. A whalebone stylet keeps the tube curved, and a large disk placed at the buccal orifice (to keep the patient from swallowing the tube) completes the first part of the apparatus. The second part consists of a glass jar, in which I place the alimentary mixture, in the upper part of which reservoir air may be compressed by means of an India-rubber ball; a long India-rubber tube connects the œsophageal part of the instrument with the glass jar.

You proceed in this manner: With the œsophageal sound, furnished with its stylet, in your hand, you make your patient open widely his mouth, putting out his tongue, as if for a laryngoscopical examination; with the right hand you introduce the tube into the back part of the throat, and cause your patient to execute movements of deglutition, and you withdraw the stylet, taking care that the disc which terminates the tube shall come in front of the mouth; you then place the extremity of the free tube which is attached to the glass jar, into the pharyngeal sound. Then you compress the rubber ball and the alimentary mixture passes from the reservoir into the œsophagus of the patient; you ask him to make efforts to swallow, and slowly but progressively you cause the liquid in the glass reservoir to penetrate the stomach.

You have often seen me perform this operation in our hospital;

you have seen the readiness with which patients consent to be fed in this way, and how much they prefer this method to the former, in which the longer and larger tube is used.

Thanks to forced alimentation, we see the appetite return, the bodily weight increase, the strength come back, and the facts which Debove has published, and those which I have noted, indicate the great future in reserve for this kind of treatment, which is applicable to all cases where nutrition is at fault, and especially to tuberculosis.

EPISCLERITIS WITH DEGENERATION OF IRIS—IRIDECTOMY FOR RESTORATION OF SIGHT.

By CHARLES W. HICKMAN, M.D., Augusta, Ga.

Lecturer on Diseases of the Eye in the Medical Department of the University of Georgia.

Episcleritis is an inflammation involving, at first, the episcleral tissue and soon extending to the sclera itself. The inflammation is characterized by hyperæmia, and afterwards swelling of a circumscribed region, which may be near the margin of the cornea or at any other portion of the sclera. Most generally, by preference, it makes its appearance at or near the insertion of one or more of the recti muscles. This inflammation soon assumes a dark blue shade and may be diffused through the general surface of the membrane or may be conspicuous by forming a bluish, black mound about the size of a buck shot at any one or several parts of the sclerotic.

In quite a good percentage of cases, the affection presents a tendency to run its course to a favorable termination in a period varying from four to eight weeks. Such, however, is not always the case. A marked tendency to relapses frequently shows itself. As fast as one tumor seems to yield, another springs up, until finally more or less of the whole affected portion of the sclerotic appears thinned and bluish, the intraocular tension greatly increased, and

the eyeball presenting, in fact, a distended bluish appearance, with one or more of the before mentioned tumors seen here and there.

Then, again, should the inflammation be situated near the margin of the cornea, it may press upon the ciliary circulation so as to materially interfere with the nutrition of the cornea, leaving that body subjected to the ills naturally attendant upon a defective nutrition. Finally, the iris may participate in the inflammation, and should this not be early recognized and dealt with, serious consequences might result, such even as occlusion of the pupil and degeneration of the tissues, as the following case will show :

The patient was a female, aged thirteen, brought to me by her grandmother, with the statement that for nearly a year she had suffered from an inflammation of her right eye. The attacks seeming to return almost as soon as any improvement was gained, until finally sight was lost. The eye presented a bluish, distended appearance, the intraocular tension quite marked and a large bluish prominence not far from the upper and outer edge of the cornea and with one or two smaller ones scattered at other places. The iris had participated in the inflammation leaving the pupil occluded. An iridectomy was advised, and the patient put under chloroform, but the iris was found so decayed that it was only by tearing away with the forceps a small fragment that an opening of sufficient size could be made in order to give the patient sight.

The two affections most liable to be confounded with episcleritis are phlyctenular ophthalmia and cyclitis. The former is easily recognized by the fact of its being an ulcerated or herpetic spot on the surface of the conjunctiva and with a leash of blood-vessels running towards it, while in episcleritis the inflammation is beneath the conjunctiva, and soon assumes the dark blue shade, the injection at the same time being more diffused and extensive. In cyclitis while we may at times have a slightly bluish look around the ciliary body, yet it is nothing like that which characterizes episcleritis. Besides, in cyclitis the pain is frequently so great and the eye so exquisitely sensitive, that the patient shrinks from the mere thought of placing the tip of the finger on it. Lastly, in cyclitis, vision is much impaired, while in episcleritis it is often not disturbed.

117 Campbell St.

SELECTED PAPERS.

TRANSFUSION.

The question of the treatment of cases of excessive loss of blood by means of injections of alkaline solutions of common salt must be held to be well worthy of consideration. Schwarz wrote on the subject in 1881, recommending this method of treatment as a safe and rapid means of saving life, and a review of his book will be found in our pages for December 17, 1881 ; and he has since made a further contribution to the subject (*Berliner Klinische Wochenschrift*. 1882, No. 35) ; and in the *Deutsche Medizinal-Zeitung*, No. 46, is an abstract of two cases by Kümmell. The advantages that a simple non-coagulable and easily prepared fluid possesses over even defibrinated blood cannot be too highly estimated ; and if, as is maintained, the real want of patients suffering from acute anæmia is not so much blood-discs as blood-pressure, the employment of an ordinary salt solution presents an easily prepared agent ready to hand in all emergencies. It is obvious, however, that a trustworthy conclusion as to the value of the proposed remedy can only be arrived at by its practical employment. Schwarz recommends intravenous injection of the fluid as in ordinary blood transfusion. In both Kummell's cases the solution was thrown into the radial artery—i. e., the intra arterial method of Bischoff. In the first example the transfusion was resorted to for hæmorrhage after the operation of nephrectomy ; a 6 per cent. solution of chloride of sodium made alkaline by a few drops of caustic soda was injected to the amount of about 160 grammes, at a temperature of about 40° C., and at a pressure of about one metre. The immediate effect was recovery from the collapsed condition, but the patient died the next day in consequence of disease of the other kidney. In the other case, in which the operation was performed on account of acute anæmia due to hemorrhage from a resected knee, about 500 grammes were introduced, the pressure not being measured. The heart was in a weak state. The general effect was all that could be desired, but a swelling in the hand was noted, which was no doubt due to rupture of capillaries by the force of the injection ; this swelling diminished, but gangrene of the hand set in, which

necessitated amputation of the forearm. In the part cut off, thrombosis of the ulnar artery was found. The mumification was attributed to the combined action of the high pressure at which the fluid was injected, and the cardiac debility, aided by the anatomical arrangement of the vessels in the hand. The author comes to the conclusion that it is better to open the median basilic vein than to use the intra-arterial method. There seems to be some ground for believing that intra-venous injections of solutions of common salt, properly performed, have been occasionally of real life-saving value; or, at least, that enough encouragement has been met with to justify a more extensive trial of this method of treatment.

In the same number of the *Deutsche Med. Zeitung* an abstract of some remarkable observations by Giulio Dozzi is given. Two cases are mentioned in which blood was transfused into the cavity of the peritoneum, one of which ended fatally in twenty-four hours, the other after ten days. Unfortunately, no other particulars are given. This operation has been done twenty-seven times in Italy, four times with fatal ending; and in two cases there was complete restoration to health. The apparent benefit from this proceeding was in most cases not lasting; and the operation had to be repeated at definite intervals, which as the earlier cases seemed to give rise to no dangerous symptoms, it was thought could be safely done. But the good results in the first cases were not maintained. It would appear from what follows that the intra-peritoneal injection was used to overcome the anaemia of chronic affections, for, looking to the lessening success of this method of treatment, Dozzi asked himself whether the introduction of similar quantities of blood into the intestinal canal might not be productive of less brilliant but more useful results. Four cases were experimented on. The first was a boy aged thirteen years, brought very low by pellagra; a litre and a half of blood was injected eight times in a fortnight, with complete restoration of health. The second instance was of much the same kind, and eleven enemata of blood were given. The third was the case of a woman aged forty years, suffering from splenic leukaemia; here twenty-eight injections were given in two months; the patient greatly improved, and the spleen was reduced in size. The last was also a case of leukaemia, in which thirty introductions of blood were performed, with slow but sure

improvement, the spleen lessening in size, and finally the blood returning to its normal state. The blood, injected by an enema apparatus, was taken from sheep or oxen whilst being slaughtered; it was defibrinated, and kept warm, if necessary, in a water-bath, the quantity used varying from one and a half to two litres. The patient gradually became able to retain this large quantity. We are warned that too much pressure must not be used, lest the blood should get into the higher parts of the alimentary tract, where it would be rather digested than absorbed. In this country we know practically nothing of the intra-peritoneal method of injection, but we should have thought that the procedure could scarcely be regarded as beneficial, or even as harmless. Enemata of blood may be nutrient, but they cannot be called transfusions in the ordinary sense of the term, and we confess to a doubt whether blood can be simply absorbed, even from the large bowel; further, this method of treatment was practiced on cases widely different from those of acute anæmia. If such modes of administering the blood of animals be of therapeutical value, they probably are not so by such direct means as Dozzi seems to suppose. Moreover, because diseases get well whilst a certain treatment is in progress, the success need not depend on that treatment. Lastly, the facts given are not sufficient to prevent some doubt of the accuracy of the diagnosis of splenic leukæmia in the above instances.—*Medical Times and Gazette*.

THE BALSAMICS.

By HENRY M. FIELD, M.D., Professor of Therapeutics, etc.

* * * * *

OL. TEREBINTHINÆ.

Materia Medica.—We need not specify the more unfamiliar varieties of turpentine, as they are but little used in medicine and are enumerated in the books. That with which we have to do is the common turpentine, obtained from several species of the pine—*coniferae*, and produced in large quantities in North Carolina.

Nor need a description be given of that which is well known to all. Turpentine oil or essence—improperly called *spirits*—should never be used in medicine until it has been rectified, by which means both imperfectly dissolved resin and an acid are eliminated from it. The resin is the common rosin of commerce or colophon.

Various pharmaceutical forms of the remedy have been proposed, but they are little used when they can be avoided, on account of their impregnation with the very objectionable turpentine taste. Best of all is the capsule, first proposed by Clertan and now furnished in the elegant form of the soft or “elastic” capsule, by Parke, Davis & Co.* For such as cannot swallow the capsule, the oil may be emulsified with gum arabic mucilage. I have found oil of cinnamon, of all other agents, best calculated to hide the taste. Four to ten drops of this oil, added to a $\frac{3}{4}$ ij. mixture, properly compounded with sugar and gum,—of which each drachm shall carry three to five drops turpentine—will render the latter not unpalatable. Or with quite young children, it may be rubbed up with honey. For enema it is best beaten up with yolk of egg. Two curious chemical facts may be mentioned in this connection; the rectified oil, treated with hydrochloric acid, provides an artificial camphor, and the oxidized or resinified oil, mixed with phosphorus, gives a result resembling spermaceti.

History.—The older writers were well aware of the virtues of this remarkable remedy; some of them, Dioscorides, e. g., would appear to have known it better than the average American practitioner of to-day. Indeed, this authority distinguishes eight different indications for its use, and also shows his familiarity with the process of mingling it, by trituration, with honey. Galen was perhaps the first to declare its value, internally used, in neuralgias.

Physiology.—Topically applied, turpentine is an active irritant, and if its exhalations be in any way confined, the pain soon grows insupportable. Added to the hot water of a vapor bath, it much increases its sudorific effect. Its accidental absorption by the respiratory passages not infrequently produces very unpleasant effects;—such are seen in persons subjected to the smell of new

*Through the liberality of this firm and the kindly offices of Mr. Raymond, I am enabled to show gentlemen of the society a varied assortment of their elegant elastic capsules, charged with different balsams.

paint of an interior. Headache, vertigo, nausea speedily appear, and the next morning the urine testifies, by its peculiar odor, to the source of the discomfort. If exposure be prolonged, all the evidences of poisoning, as by one of the class of contro-stimulants, may be developed,—paleness, anorexia, palpitation, syncope, &c. Furthermore, there is authority in what we know of the action of the drug for the prevalent impression that inhalation of turpentine, thus continued, may occasion miscarriage. Some individuals are not susceptible to any of these influences; and doubtless there is much in habit in rendering one, after a time, unimpressible.

Received by the stomach in dose of five to fifteen drops, a sensation of warmth is at once experienced, followed perhaps by eructation and slight digestive disorder. The urine afterward passed exhales the odor of violets. From the ingestion of a drachm and upward, will supervene an exaggeration of these symptoms, with redness of the face, headache, quickness of pulse,—in a word, the general signs of fever,—dysuria, scantiness of urine, &c. The breath, moreover, is strongly impregnated with the smell of turpentine. A poisonous quantity may occasion a veritable terebinthinate intoxication, which, however, need not be described. One fact should be mentioned: the urine of one taking turpentine, will often coagulate on treatment with nitric acid, but this, as Gubler has shown, is not from the presence of albumen, but from that of the resin of the oil. The addition of alcohol will at once procure its re-solution.*

* Turpentine ingested in considerable quantities may irritate the bowels and pass off so speedily, after the manner of a purgative medicine, that no other sign of its physiological impression will appear. Finally, as Hippocrates was well aware, it exerts an influence calculated to promote and increase the menstrual flux.

Therapeutics.—This remedy would *a priori* be first directed against disorder of either the bronchial or the urinary mucus membrane, as it is toward the corresponding organs it is determined in its elimination from the body. Although the pure oil is entirely divested of resin, yet its combustion within the body will produce

*A prominent medical journal, within the fortnight, reports a case of albuminuria from the continued use of turpentine. Probably proper tests would have shown this to be a misapprehension.

this substance and this will seek its egress through the kidneys. On the other hand, the essential oil, unchanged, will be given forth in the breath.

Our first indication, then, for a resort to turpentine, is in *Chronic Catarrh of the Bladder*. Much has been written on this subject in the way of nice distinction; which does not need to be read. In short, there should be an absence of pyrexia; that is, it is in true *Chronic* catarrh that turpentine is calculated to do its beneficial work. Rightly applied, it is probably our best remedy. When it cannot cure,—and some cases are incurable,—it will almost constantly ameliorate the condition of the patient. Two observations should be kept in mind in this connection, one of which also applies to the use of turpentine in general, and the other has direct bearing upon the disease now being considered. It is a fact of the physiological action of the remedy that, with some individuals, a comparatively small dose determines violent effects, either upon the digestive tube or more remotely upon certain organs and functions; while others will find themselves cured by the use only of very large quantities, although scarcely aware of any physiological impression. We must, therefore, begin our turpentine treatment tentatively until we have ascertained the susceptibilities of the patient. And, secondly, as respects catarrh of the bladder, it is a precaution of importance not to discontinue the turpentine as soon as the urine no longer shows traces of catarrhal or purulent secretion, but to pursue its use for many days and even for several weeks in slowly diminishing doses; for nothing is more common than a relapse of vesical catarrh.

Second, *Pulmonary or Bronchial Catarrh* is often amenable to turpentine. The condition especially demanding recourse to this agent is bronchorrhœa, with much purulent discharge, in which almost incredible quantities may be raised in the course of the day, often with very little effort of cough or otherwise. Such subjects were condemned as consumptives before the introduction of Laennec's method of chest exploration. In this condition, says Trousseau, the balsams and tar in particular have it in their power to work a kind of prodigy in restoring to health patients who seemed to be marching forward to inevitable death, with all the outward signs of the most rapid colliquative consumption.

Third, in *certain diarrhœas*, and notably the diarrhœa of typhoid fever of a certain type, turpentine may serve as the essential and the only effectual remedy. Such is the diarrhœa attended with meteorism, swollen, dry, and brown tongue, much sordes, &c. Small doses given often,—five drops every two or three hours,—often have a wonderful effect, both as to promptitude and thoroughness. Change in the tongue, which soon begins to grow moist, is an index of the benign impression made upon the length of the alimentary canal. The oil moreover in its role of diffusible stimulant has a fortunate influence upon the subject of typhoid fever. The remedy is invaluable also in all colliquative diarrhœas. Here its antiseptic virtue is of avail and, as well, an astringent and dessicative property which is inherent to it, but on which we did not stay to remark when we glanced at its physiological action. Not infrequently, also, it is the only effective remedy for chronic diarrhœa which has resisted all other—and at times very various approved treatment. The late civil war gave many illustrations of this. Finally, there is a form of diarrhœa, which can hardly be classed as chronic, but which may have already lasted for some time from lack of response to various measures directed against it, of doubtful origin and obscure pathology ;—here turpentine often proves an all-sufficient remedy. It is seldom that the stomach will refuse the moderate doses required, especially if they be administered in the capsular form. It may as well be stated here that a few drops of laudanum will often enable the stomach to retain a dose of turpentine which would otherwise be rejected or at least be kept with much discomfort.

Fourth, the value of turpentine in *neuralgia* is one of the established facts of medicine ; established both by the observation and the authority of centuries. It is in idiopathic neuralgia that its best results are promised,—that which does not depend on malarial infection, is not rheumatismal, or which is not occasioned by pressure, as of bone, or by disease of nerve. Here the remedy often succeeds where other approved remedies have failed. According to some observers the form which is most amenable is that occupying the lower extremities, and especially sciatica. Trousseau and Pidoux order doses which range as high as 60:200 drops for the twenty-four hours, in capsular form. It is a capital condition that

the remedy should be taken at time of eating. In exceptionally obstinate cases, it is often well to call in the conjoined or alternate use of quinia, opium, belladonna or aconitia. Frictions of turpentine, *loco dolenti*, may sometimes assist the operation of the drug internally administered.

“As to visceral neuralgias, so rebellious, so common, especially with females, they are more effectually combatted with the oil of turpentine than with any other remedy; and it is a singular thing that neuralgia of the stomach and of all the viscera which are most under the jurisdiction of the solar plexus, is that which best obeys the action of this powerful agent. It is strange to see with what facility delicate females will support considerable doses of turpentine; and it is rare that the neuralgia, even stomachal neuralgia, is augmented for the occasion by the exhibition of the remedy.” [T. & P.] In the rare cases in which it is not well borne, aid may be had from two to four drop doses of laudanum, as just remarked. It is just in these cases, where the remedy must be continued for a considerable time, that it is most important it should be rendered acceptable to the patient, and this can hardly be done otherwise than by the capsular method. “The distaste at first may not be great, but after some time it becomes invincible and the simple odor of the turpentine gives rise to vomiting.” Or, when the taste is not complained of, the topical irritation of the pharynx, each time more intolerable, ends in bringing about the same disaster.

Fifth, as *Anthelmintic*. The application of turpentine for the removal of intestinal worms is not placed by Dioscorides among the eight indications for its use, and it is not certain that ancient writers were aware of its vermifuge virtues. Such anthelmintic action is very sure, whether as applied in the milder and more common varieties of worms, or the more formidable, as tænia. The French give the following account of the discovery of its value in this direction. “A sailor suffered from tape-worm and remarked that every time he drank much gin he discharged a portion of the parasite. English sailors in their geneva replace juniper berries by a certain quantity of the essential oil of turpentine. The sailor, attributing, with justice, the vermifuge power of his liquor to the potent essence it contained, thought to deliver himself completely

from the cause of his malady by administering the turpentine pure and in larger doses. The result was successful; the tænia was killed and expelled." Here we must give generous doses. Homœopathy never had any influence with the tape worm. ʒ ij–iij with ʒ ss castor oil, both to emulsify and assist purgative effect, taken early in the morning, and fasting. Many may object to resort to so harsh a remedy, but when it does not disturb the stomach it is better borne than would be supposed; indeed, the weak patient is sustained by its stimulant power. It is especially applicable to such as have previously used the so-called specific teniafuges without avail;—they will not often be disappointed in turpentine. The oil is also of great value in the worms of children,—indeed I suspect it affords us our only assured resource—small doses frequently repeated for a brief period.*

Sixth, turpentine has general reputation as a *haenrostatic*. Such property would hardly have been anticipated, and it is impossible fully to explain it. Little impression may be made upon the present attack, but the oil is given prophylactically and with a view to prevent repetition of bleeding and relapse. It would appear to be equally valuable in epistaxis and hæmoptys's. Small doses should be given several times a day.

Seventh, as antidote in *phosphorus poisoning*, whether the exposure be through carelessness or by continuous contact with the metalloid in certain of the arts, e. g., as with friction match-makers. This invaluable property of turpentine was first made known to the profession by Dr. Andant, within recent years.

†Eighth (and lastly) as *External application*. Turpentine applied externally under proper circumstances will accomplish results different from those of every other topical application; and such use often declares a two-fold efficacy, in a modification exerted upon the part to which the oil is applied, and in an influence exerted upon the entire system, by means of absorption. The ancients were

*I have used the following formula for full fifteen years:—℞ Ol Terebinth., gtt lxxx, Ol Cinnam. miv, Mucilag. Acac., Syr. Simpl., Aq. Puræ, aa5v. M. Sig., one teasp., etc.

†There happens to be identity in the number of indications assigned to turpentine and the number recognized by Discorides; but identity goes no further. Indeed, certain of the claims of the latter would be hardly maintained by any one at the present day.

familiar with the counter irritant action of turpentine, and seem also to have regarded it as a partial anodyne, as when brought in contact with a rheumatic joint ; but there is no evidence that their knowledge extended further than this. Such use of the oil must be properly guarded—its fiery nature must be kept in mind. Several folds of flannel, upon which it has been let fall in drops, no part being actually wetted with it, will generally best answer the end in view. Properly employed, turpentine has not alone a rubefacient or a vesicant influence, easy to graduate ; it acts also as an energetic diffusible stimulant, absorbed as it is through the skin and by respiration. The most imperative occasion for recourse to this measure is perhaps presented by peritonitis ; here, under the most favorable conditions, the depressed, thread-like pulse speedily shows a measure of relief, the deep red or purplish hue of the face is much diminished, there is increase of vitality, vomiting is relieved or arrested, and pain and meteorism of the bowels are lessened. We had almost said that in peritonitis no other application to the bowels is admissible but turpentine. The diarrhœa and tympanites of typhoid fever present another claim for a similar use of the oil, equally emphatic ; its external employment renders valuable aid to the same remedy internally administered, and as much may be said of certain diseases of the bladder and kidneys in which turpentine is our chief internal remedy. In common colic, also, if prolonged, turpentine is the best thing that can be applied to the bowels. In attacks of palpitation and dyspnœa from weak heart, there is nothing else, applied to the præcordia, that will do so much good, unless, possibly, dry heat. In bowel application, care must be taken to protect the region of the groins, the skin of which is especially sensitive.*—*Extract from a paper read before the Medical Society of New Hampshire, June, 1882.*


A well-high indispensable external application of turpentine, is in *carbuncle*. Here it should be moderated with castor oil;—the part kept soaked in a mixture containing one part of turpentine to two or three of the fixed oil. This is the treatment of Sir Jas. Paget, who, in 1862, in the pages of the *Lancet*, taught the profession both to discard the *crucial incision*, and also, what could be accomplished with the mixture just mentioned. The writer of this paper, so far as he is informed, was one of the first in this country to report cases thus treated ; and he has followed the treatment ever since. Results, if detailed, might seem exaggerated to one unfamiliar with the method.

EDITORIAL.

NORTH CAROLINA MEDICAL JOURNAL.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY, PUBLISHED
IN WILMINGTON, N. C.

THOMAS F. WOOD, M. D., Wilmington, N. C., Editor.

 *Original communications are solicited from all parts of the country, and especially from the medical profession of THE CAROLINAS. Articles requiring illustrations can be promptly supplied by previous arrangement with the Editor. Any subscriber can have a specimen number sent free of cost to a friend whose attention he desires to call to the JOURNAL, by sending the address to this office. Prompt remittances from subscribers are absolutely necessary to enable us to maintain our work with vigor and acceptability. All remittances must be made payable to THOMAS F. WOOD, M. D., P. O. Drawer 791, Wilmington, N. C.*

THE TARBOROUGH MEETING OF THE MEDICAL SOCIETY.

Those of us who were present at the meeting of the Medical Society in Tarborough in 1867, will remember how pleasantly the session went on, and how unbounded was the hospitality of the profession and the citizens in general. That was one of the early meetings of reorganization, after the war, when old comrades met after the the rough and dangerous service of the field and hospital, to enter upon the more congenial duties of promoting the progress of medicine in the long disused walks of civil life. In looking over the list of those then present, we are pained at the death of so many tried friends of the Society. Murphy, Norcom, McNair, and Wilson have passed away, but not without leaving the impress of their good work upon our organization.

Our next meeting in Tarborough will be under somewhat changed circumstances. One of our auxiliary bodies, after a useful career of several years, has been mercilessly crippled by the Legislature.

The North Carolina Board of Health, instituted in an unselfish desire on the part of the Medical Society, to render to the State its share of duty in promoting her welfare in the arduous race of civilization, has been obliged to succumb after a hard struggle for existence. Although the Board did not hide its light, but made itself felt all over the State by its work of sanitary instruction; although it did not cost the State but \$200 a year, and did not run counter to the schemes of the pettiest politician, as far as could be ascertained, there were only seven members of the Senate who believed it to be worthy of existence.

We hope the Society may find some one who will be willing to undertake the unequal task of organizing another Board upon a different plan, but we hardly think it possible. The people are not ready for it, and the politicians do not see in the advocacy of it, anything to make campaign capital for them. We believe that there is nothing left but for each town to look after its own health interests and for the medical profession to render sanitary services when the corporations are ready to pay for them.

This is one of the matters which will require the attention of the Society, if for nothing else, at least to put on record the part taken in this vain struggle.

The Chairmen of Sections have but a few weeks now to complete their reports. This is an important part of our work, and should be entered into with conscientious preparation. We have had some excellent reports in the past, but the method could be greatly improved by summarizing more concisely the history of a given department, and by confining it more strictly for the given year.

Voluntary papers, founded upon study of cases or groups of cases, have never reached anything like the position in our Transactions that they should. Immense masses of valuable facts are neglected, and treated as too unimportant to be put on record. Doubtless much that we see in our daily rounds is not striking, but the physician who does not learn to observe and record every day matters, cannot acquire the facility of observation and expression when he desires to report selected cases. This JOURNAL feels very much the lack of such help, and the Society cannot flourish and maintain a high position without it.

The Board of Examiners will hold its meetings, commencing one

day in advance of the meeting of the Society, in this way giving all successful candidates an opportunity of connecting themselves with the Society and participating in its work.

We anticipate a pleasant and profitable session, if the social features are not too attractive. We trust that our Tarborough friends may not be too lavish in their hospitality, but kindly favor our work by allowing the Society the greatest number of hours for its sessions.

SMALL-POX IN WILMINGTON.

A case of small-pox appeared in the person of the mate of a vessel from Baltimore, on the 3d of March. The eruption appeared after his admission to the Marine Hospital. He was promptly removed to the Mt. Tirza hospital, four miles below the city.

This patient claimed to have been vaccinated, but the most diligent search did not discover even a faint cicatrix. Surely to be vaccinated is one thing, but to be protected by a genuine vaccination—vaccinized, in other words, is a vastly different thing.

WHAT THE PRESS THINKS OF OUR SOCIETY WORK.

It is very gratifying to read the good words which the press of the State has for the work of our State Medical Society. We often think can it be possible that the men who occupy the honorable positions as Legislators can belong to the same race of people with the thinking men who conduct our newspapers.

At the same time a Legislature is treating our working with unreasonable scorn, read what the *Methodist Advance* says :

“Dr. W. P. Beall, of Greensborough, read an essay before the Conjoint Session, on Preventive Medicine; a subject which has had much attention given it in Europe for a number of years, and

is attracting more and more concern in this country. This is a matter which, perhaps, more directly and largely concerns every man, woman, and child, in the State, than any other in the list, it being true, we believe, as the writer asserts, 'that a very large proportion of the annual mortality of this country is due to causes clearly preventable.' And it was upon the recognition of this fact, as we understand it, that it was provided for by act of the Legislature. And if any intelligent gentleman will read the report of the Secretary of this Board, he cannot fail to be convinced, that with proper fostering by the State, the people will be benefited immeasurably more, in dollars and cents, than the cost of the Society to the State. This Society being manifestly for the interest of the people and not the doctors, it is simply amazing to us that our recent Legislature should refuse to afford it necessary assistance. But such, as we understand it, is the fact."

THE CAPITOL AGAIN.

In our remarks on the Defeat of Public Health Legislation, (Feb.) we hinted at the shocking violation of decency and sanitary rules, constantly practiced in the Capitol. Since then we get news of some of the practical results of these abuses, in the serious illness of two clerks employed at the Capitol. Their disease is typhoid fever, and there is at present no doubt that the cause of the disease is directly due to the unhealthful conditions of the atmosphere in which they worked.

It is shameful, that of the number of representatives assembled at Raleigh during this winter, that not a man raised his voice in condemnation of the filthy practices there enacted.

If ever a State needed the sanitary advice of a Board of Health. And a one-man power to execute unflinchingly this advice, that State is North Carolina.

The victims of the pestilence-breeding air have our earnest sympathy, and we only wish that it could have fallen to the lot of members of the Legislature, instead of the innocent; then perhaps, we would have had a sanitary reform inaugurated in the future.

REVIEWS AND BOOK NOTICES.

THIRD ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF SOUTH CAROLINA. For the Fiscal Year Ending October 31, 1882. Columbia, S. C. : Charles A. Calvo, Jr., State Printer, 1882.

The organization of the South Carolina Board of Health is the South Carolina Medical Association, and to the Executive Committee composed of seven members of the Association and two State officers, the Attorney-General and the Comptroller-General, is delegated the work. This Executive Committee is further divided into Standing Committees: *On Ordinances and Sanitary Code, Medical Topography, Endemic and Epidemic Diseases, Quarantine, Registration of Vital Statistics, Finance, Adulteration of Food and Drink, Sale of Drugs and Medicines, Sanitary Regulation of Schools, Sanitary Condition of State, Penal and Charitable Institutions.*

The Association is divided into Sub-Boards of Health for each County. With this machinery, and with an annual appropriation of \$2500, this useful organization is carrying on a most commendable work.

We notice among other interesting topics, the following, selected as examples of the activity and comprehensiveness of the investigations :

Reports of the Standing Committee on the Sale of Drugs and Medicines.—The Report is made by Dr. J. Ford Priolean. He points out the difficulties in the way of reforming the sale of drugs. He considers that many harmless remedies sold are necessities of the people, but it is difficult to draw the line which would separate the simpler drugs from those more potent, and where the sale of medicines ought to be restricted. "There can be no doubt, however, that the prescribing behind the counter by druggists, by the use of old prescriptions of physicians, by the advertisement and vending of nostrums of which the originator alone knows the ingredients, that mischief occurs." He does not believe that it would be possible to lessen the evil, as, "it is impossible for legislation to advance beyond the wishes of the people."

Another paper by Dr. B. W. Taylor "On the Hygiene of Schools," covers the ground fully, and is full of common-sense advice to teachers, parents and children.

Dr. Bates, of Columbia, follows in a paper on "The Injurious Effects of the Improper Use of the Sewing Machine Upon Women, and How to Avoid Them."

The most lengthy paper is by Dr. T. Grange Simons, of Charleston, "On the Organization of Local Boards of Health and Some of the Means by which they can Aid the State Board of Health, by Maintaining Local Sanitation; also, on the Duty of the Citizen as a Factor in Preserving Public Health."

There is a paper also by Dr. James Evans, of Florence, on the "Excessive Use of Tobacco." Dr. Evans has done excellent service in presenting this paper in such a fair light. The use of tobacco is greatly on the increase, and there must be some positive outspoken discussion of the present condition of the evil.

We quote a portion of this paper, not because the account given is new, but because we are pleased to see that the evil is attracting the attention it justly deserves :

No form of using tobacco is so repugnant to every feeling of delicacy and refinement as the disgusting habit of dipping snuff, which is practiced by females belonging to the lower class of white people in the South and West. The favorite preparation of tobacco used for this purpose is Scotch snuff. These women use brushes made of small twigs, with which they rub their teeth or chew after being dipped into snuff. The mouth, teeth and lips are deeply stained with the tobacco, and, as they seldom relieve themselves of the excessive flow of saliva by spitting, a considerable quantity of the snuff reaches the stomach. They jealously conceal the practice from strangers and persons whom they suppose are not addicted to the habit. It is considered almost a breach of hospitality not to provide snuff and twigs for brushes to their friends and associates when visiting their houses. The althea, on account of the facility with which its bark strips, its agreeable flavor, and the fine, white and tough fibres of the wood, is prized very much as a material for brushes. I have known this ornamental shrub to be cultivated by some families solely with a view to this use.

Persons who take snuff in this manner for any length of time have a striking and characteristic appearance. Usually they are very thin and emaciated and the subject of marked anæmia. The feature which strikes us as the most peculiar and interesting is the discoloration of the skin. The complexion of the fairest blonde

will lose its transparency and whiteness and assume a yellow tint, which in many instances deepens and becomes positively dark and swarthy. I believe, too, it has a similar effect on the color of the hair, giving it a darker hue, and at the same time rendering it dry and harsh and less glossy. These women are martyrs to dyspepsia and the neuralgias, always complaining of loss of appetite, lumps in their throats and shifting pains in every part of the body. They are great coffee drinkers, and when they have the means to keep a supply on hand usually drink freely of it through the day. Coffee is a very good antidote for the depressing effects of tobacco, and I have no doubt these people drink it for the relief it affords them for the debility and sense of sinking from which they so often suffer. All of the baneful effects of excessive chewing are found in an exaggerated degree in individuals who take tobacco in this way. Their children, more especially the girls, acquire the habit at an early age, usually before they enter their teens. The frail body, pallid face and pinched features contrast painfully with the plumpness and ruddy hue and glow of healthy children. The pallor of some of these children is distressing to behold; the skin is almost of marble whiteness, and there is an absence of color in the lips, and even in the tongue. The abdomen is somewhat tumid and there is some enlargement of the spleen and liver. They are listless and quiet and sedate beyond their years; they seldom engage in play, but are content to look on from indisposition to take part and from sheer breathlessness. Finally, a sub-febrile state ensues, attended by more or less diarrhœa, which medicine is powerless to control. While the use of tobacco in this form may not be the sole cause of this profound anæmia, yet it is the prime factor in producing it, aided, perhaps, by an inherited weakness of constitution and poor and unsuitable food. The importance of preventing children from acquiring the habit of using tobacco *in any form* cannot be too strongly impressed on parents.

The taste and odor of tobacco is nauseous and sickening to every one at first and requires many trials some little time before it can be indulged with impunity. This is the time to impress upon them that it is an idle and expensive habit and full of danger to their health and constitution. Dr. B. W. Richardson, one of England's greatest physicians, has deemed the use of tobacco an evil of such magnitude and so fraught with dire consequences to the race that he has thought it not an unworthy object to devote his time and talents to the organization of societies through the kingdom for the prevention of juvenile smoking.

By the laws of the State, all physicians are required to register their diplomas, and all druggists and dentists are required to register.

If we cannot sustain a Board in North Carolina, we can, never-

theless, recognize good work done by our neighbors, and wish for them above all things, that they may not fall into the hands of ignorant politicians.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN, FOR THE USE OF STUDENTS AND PRACTITIONERS. By JAMES NEVIN HYDE, A.M., M.D., Professor of Skin and Venereal Diseases, Rush Medical College, &c., &c. Philadelphia: Henry C. Lea's Son & Co. 1883. Pp. 572.

A new candidate for favor on the subject of diseases of the skin, at this stage of the development of the science, will necessarily be thoroughly scrutinized, and faithfully compared with previous works.

The arrangement of Dr. Hyde's treatise is very similar to that of Dr. Duhring. The preliminary chapters are on the structure of the skin and nails, on the functions of the skin, and on general diagnosis and prognosis.

Three systems of classifications are given, viz: Hebra's, the author's, and that of the American Dermatological Association. Either system answers better than the old forms, and aids in a considerable degree in arriving at the pathology and diagnosis.

We miss, often, though, a careful enumeration of synonyms, which is many times indispensable to the general practitioner to a clear understanding of the subject. Nor is this to be wondered at when we remember that dermatology was formerly hardly more than a cumbersome and difficult nosology, apparently designed to befog the understanding of the aspiring student. For instance, we look in vain, for *Porrigio*, there being no hint whatever that this old term is no longer used, but *Impetigo* has taken its place.

In the etiology of *Psoriasis*, the author does not recognize *syphilis* as a cause, and in this teaching resembles Dr. Duhring. The treatment of the disease is far from satisfactory, although the author traverses the whole field of the therapeutics applied to the disease. "In many cases I am fully persuaded, heterodoxical though the belief may be, that the *psoriasis* calls for no treatment. Such are the extremely indolent cases, where the patches exist in middle aged adults upon the parts of the body entirely protected by the clothing. It is then harmless, painless, and in no sense

annoying, save as it occasions unnecessary mental disquietude. * * * It is, in short, in such cases, much more of a deformity than a disease, and, as compared with the uncertainties and discomforts of prolonged treatment, may often be better tolerated with a patient equanimity." P. 213.

We were struck with the statement that Pityriasis Rubra is such a rare disease, and that Duhring, Geo. H. Fox and the author have described the only cases to be found published in this country. We have seen two examples of the disease, and both cases in females. The gravity of the prognosis is correctly stated.

Prof. Hyde has introduced a chapter on the exanthemata, in this differing from Prof. Duhring. He insists on the strong individuality of r  theln, his experience being founded upon the observation of more than a hundred typical cases.

Quite a number of illustrations on wood, are distributed through the volume, some of them of rare diseases, never before published. While such illustration cannot be adequate to a correct diagnosis, they are very useful.

Had we not become acquainted with Prof. Duhring's work, we should have given this work of Dr. Hyde a higher place; but with both of them, and by the aid of Duhring's Atlas, and Fox's Photographic Illustrations, the American doctor need not go beyond the seas for his knowledge of skin diseases.

The general practitioner cannot fail to discover the immense assistance, which American dermatologists have been to them, and they cannot fail to watch the continued development of this very active branch of medicine with increased interest.

FOURTH ANNUAL REPORT OF THE STATE BOARD OF HEALTH,
LUNACY, AND CHARITY OF MASSACHUSETTS, &c. January.
1883.

We take up this volume with many regrets. Formerly it was welcome to our table for its valuable instruction. It was always well prepared, and the treatment of the vital questions of health were timely, and thoroughly done. But politicians have tinkered with the law of organization, driving away first one and then another of the able men who composed the Board, until nothing is left but the shadow of its former existence. The hands of poli-

ticians blight every work requiring scientific studies. Politicians do not understand anything that does not make a noise to stir up the voters. We regret the fatal blow that has nearly destroyed a body that we looked up to as the pioneer and exemplar.

A DICTIONARY OF MEDICINE, INCLUDING GENERAL PATHOLOGY, GENERAL THERAPEUTICS, HYGIENE, AND THE DISEASES PECULIAR TO WOMEN. By Various Writers. Edited by RICHARD QUAIN, M.D., F.R.S. In one large 8vo. volume of 1834 pages. D. Appleton & Company.

This is not a dictionary of medical terms, but a dictionary upon the plan of Copeland's Dictionary. The contributors are men of reputation, as an encyclopædia it will be found useful as a reference book. The volume is sold only by subscription, and may be had from Mr. W. W. Hayne, 134 W. Baltimore Street, Baltimore. Price \$8.00.

CHLOROFORM-WATER IN GASTRIC IRRITATION.

Weak alkaline solutions have been employed in many chronic affections, carcinoma, catarrh, dilatation, &c., of the stomach, with great benefit, thus getting rid of the accumulations which cause the fermentations, of which many, under different conditions, take place in the stomach. Bianchi was led to use chloroform-water from the well-known antizymotic properties of chloroform, and finds it most successful. He quotes at length three cases in which it did good—gastric carcinoma, chronic gastritis, and gastric catarrh, with distension of the stomach. A litre of chloroform-water is introduced, and allowed to remain from a few seconds to a minute. The chloroform does not irritate the mucous membrane of the stomach, but seems rather to excite it to more active function and secretion of gastric juice. Though the litre of water may contain from 5 to 10 grammes of chloroform, there is no effect on the organism at large, as the stomach absorbs it slowly, and with difficulty.—*London Medical Record*.

CURRENT LITERATURE.

THE USEFULNESS OF STYPTICS.

In a paper read before the Philadelphia County Medical Society, Dr. J. B. Roberts (*Philadelphia Medical Times*, January 27, 1883) argues with much force against the use of styptics in general surgical practice. He states his objections to their employment in the following propositions: 1. Their reputation as hæmostatic agents leads practitioners to resort to them when more trustworthy methods are needed. Thus valuable time is lost, for, after temporary arrest, the hemorrhage recurs in the already anæmic patient, and is perhaps followed by disastrous results. 2. If they fail to control the bleeding—which they generally do if the hemorrhage is important—it is often so difficult to rid the surface of the pasty clots that subsequent ligation of the vessels is well-nigh impracticable. 3. Many styptics prevent union by first intention, because they irritate the raw surface, lead to inflammation, or induce suppuration.

He says, further, that Monsel's salt—the subsulphate of iron—has probably more reputation than any other styptic, yet it is the most objectionable of all. It covers the wound with black, sticky clots, which obscure further examination of the surface, prevent primary union, and may even allow bleeding to occur beneath them. I have seen such leathery masses of coagulum raised up into vesicles by the subjacent hemorrhage.

There are but two scientific and satisfactory ways of arresting hemorrhage as usually observed in the practice of general surgery: 1. The first is occlusion of each individual vessel by ligation, torsion, or acupressure, and is generally not required for arteries smaller than the facial, nor for veins, except those of the largest calibre. 2. The second method is direct pressure by compresses and bandages, which, if properly applied, will always be effectual when the first method is not demanded. It is to be adopted when there is oozing from small arteries and capillaries.

In all cases of traumatic hemorrhage, it should be recollected that a man can lose many fluid ounces of blood without serious injury, and also that no artery or vein can bleed if it is compressed by the fingers. These facts assure the surgeon that there are always time

and means to control the bleeding, at least temporarily. Many arteries that spurt freely when first divided soon spontaneously stop bleeding. Therefore it is foolish to interrupt the steps of an operation by ligating every little vessel that throws out a jet of blood. Let the surgeon proceed, even if the arteries are quite large, and when he has finished his incisions he will find, to his surprise, very few points requiring ligatures. He should ligate these, and, after washing away the loose clots, make moderate and equable pressure. There will then be no part for styptics to play. It is possible, perhaps, that there may be occasional instances of oozing where pressure cannot be effectually applied ; but these are certainly so rare that they do not materially affect the truth of the proposition that styptics are useless.

This statement of the case is not unlike that in Billroth's Surg. Path. P. 38.

You will rarely see styptics employed in the surgical clinic ; they are rather favorites of the practicing physician, who is not accustomed to ligate arteries. Where we can ligate or compress, we should not use styptics. In parenchymatous bleeding, from the face, neck, or perinæum, we may resort to styptics with advantage, if it makes no difference whether the wound suppurates subsequently ; but, if the hæmorrhage be considerable, and styptics fail, subsequent ligation is much more difficult, as the wound is often terribly smeared up by the previous application.



WAS THERE EVER SUCH A SPECTACLE !

In the discussion of an appropriation for the National Board of Health, in the House of Representatives, Mr. Ellis, of Louisiana, held up to ridicule the investigation of Prof. Mallet into the pollution of water, a work undertaken by direction of the Board, which has yielded most important results. Prof. Frankland, of the National School of Science, South Kensington Museum, London, says of this investigation of Prof. Mallet : "I consider it to be

one of the most important contributions ever made to our knowledge of the propagation of epidemic diseases." In order to fully appreciate the wit of the honorable member from Louisiana, which convulsed his learned fellow-members, it is necessary to say that the biological investigations were conducted in the laboratory of Prof. Martin, of Johns Hopkins University, and consisted in testing the effects of the water pollution upon rabbits by subcutaneous injections. In the following language, redolent with Congressional eloquence, the member from Louisiana paints an imaginary scene :

“ ‘ Now listen, all ye gods ! ’ What a spectacle ! In the heavy slumbrous air of the tropics the Angel of Pestilence is hovering with lungs breathing poison and outstretched wings from which death drops, preparing to swoop with the death instinct of the vulture and the fierceness of the condor upon the Southern coast. Cities grow pale and the land cowers with dread and men cry for help from the threatened death. Where, then, is the National Board of Health ! Gathered about a table, that distinguished body is engaged in injecting a certain kind of water under the skin of a rabbit, just to see how the rabbit would like it, and how the health of the rabbit will be affected by it. [Great laughter and applause.] Was there ever such a spectacle ! ”

We answer, truly, there never was such a spectacle as this Congressional scene presented ! There is probably not a deliberative body in Europe which would not have hissed with scorn at such allusions to a scientific investigation by a department of government. When we contrast such puerilities of our statesmen with the action of the British Parliament, which not only listened with profound respect to the long series of observations and experiments by which Jenner established the value of cow-pox as the great and unerring preventive measure against small-pox, but voted him a half million of dollars as a reward for his services, we can appreciate the immense superiority as regards intelligence of foreign as compared with American statesmanship.

If by such stuff Congress can be led to destroy a branch of the public service of its own creation, which has won the gratitude of half the people of the United States, and the respect of the scientific world, there is little hope of soon having a permanent and useful health organization connected with general government. That the

public money will hereafter be freely expended in case of epidemic outbreaks there is no doubt. Nor is it less doubtful that it will ultimately be demanded that the medium selected for that purpose shall be some compliant political agency.—*Phil. Med. News.*

ON THE ACTIVE PRINCIPLES OF OFFICINAL PODOPHYLLIN.

Continuing his important researches on podophyllin, Dr. V. Podvysotzky, of Dorpat, states (*Voenna-Mediz. Journ.*, Nov. 1881 and Jan., Feb., March, 1882) that both the root of the *Podophyllum peltatum* and podophyllin (that is, the alcoholic extract of the root) contain a resinous, amorphous, bitter, and very active substance, which the author named podophyllotoxin. This is a mixture of two distinct chemical compounds, called by Dr. Podvysotzky, 'piropodophyllin' and piropodophyllinic acid.' As experiments on animals show, both emetic and drastic properties of podophyllin and podophyllotoxin depend exclusively upon their containing piropodophyllin, large doses of which produce vomiting, small ones only purgation. In view of a high costliness of the preparation of piropodophyllin (which represents the essential active principle of *Podophyllum peltatum*), the author recommends to use podophyllotoxin, best of all in form of an alcoholic solution; while prescribing, it is necessary to take into consideration that this substance is precipitated by an excess of water and by alkalies. Being used internally, the remedy begins to act by the end of four hours, or still later; hypodermically, by the end of two hours. The careful study of clinical results of his own and of other observers, and the experiments made in animals, lead the author to the conclusion that podophyllotoxin is a very useful remedy for constipation, is very comfortably borne by patients, and does not interfere with digestion even in cases of its being used for a long period. It is indicated especially in chronic constipation in consequences of intestinal atony and sluggishness, in catarrhal icterus, and such like cases. The doses are given as follows: for an adult, from $\frac{1}{4}$ to $\frac{1}{3}$ of a grain at a time, from $\frac{1}{2}$ to $\frac{2}{3}$ of a grain daily; for a child, from

1-120th to 1-60th of a grain in each dose ; the second dose is to follow not sooner than eight to ten hours after the first. The best preparation for an adult is made by dissolving two grains of podophyllotoxin in 200 grains of rectified spirit. The dose is thirty drops in a small glass of wine. Alkalies (as soda-powders, &c.) should be avoided during the treatment.

[The paper is very exhaustive, and generally is a very valuable contribution to pharmacological and clinical literature. Dr. Podvysotsky's labors on podophyllin justly gained for him an eminent position amongst Russian pharmacologists. Dr. Braun's paper on podophyllotoxin may be found in the *London Medical Record*, March, 1882, p. 93.—*Rep.*]

THE PHYSICIAN IS A GOOD MAN, SKILLED IN HEALING.

The address* delivered before the graduating class of the Medical Department of the University of Louisville, by Dr. Theophilus Parvin, may well claim the attention of fresh graduate and old practitioner. Dr. Parvin is a ripe scholar, a Christian philosopher, the "good man, skilled in healing," and doubtless his influence upon the graduates, was not only in this address, but in all his intercourse with them, will make them better men, and better physicians.

We quote the following :

How vast the range, how many the means for the cure or preventing disease offered the rational physician ! Thank God, true medicine does not, like some of the petty sects which have wandered from it, build a castle in the air upon some floating half truth or some silly delusion. It is not a mere sham, a creation of to day ; it is a living truth, strong with the growth of centuries, and growing still as the light of science grows. From Hippocrates down through the long line of famous successors, it challenges the world for greater, nobler, more philanthropic men. Need I mention such

**The Louisville Medical News*, March 10th, 1883.

names as Harvey, Jenner, Sydenham, Boerhave, Pinel, Simpson, and a host of others.

“Tongues of our dead not lost,
But speaking from death's frost
Like tongues of fire at Pentecost.”

Have any or all of the petty sects, these mushrooms that grow up in the darkness from the damp soil of ignorance and superstition and then rot and give place to other stools for toads, accomplished for the race what Sydenham, or Harvey, or Jenner, or Pinel, or Simpson did? All the medical sects might perish, and they would hardly take with them into deserved and disgraceful oblivion the name of a single man who by the suffrages of the world would be called really great.

The rational physician will employ in the cure of disease all agents which experience, observation, reason or physiological experiment has proved valuable. He draws his therapeutical means, some from earth's minerals, many from her abounding flora, rarely nowadays from her fauna; he makes air and water his ministers; he lays his hand upon the subtle forces of nature, light, heat, and electricity, and compels them to do his bidding. Nay, more, he evokes the secret forces of his soul, awakens faith, stimulates hope, strengthens a weak will, arouses a slumbering conscience, gives reason a higher power, sends the current of thought into new channels, and thus, as it were, re-creates the spiritual for its power over the material.

COMMENCEMENT OF THE MEDICAL COLLEGE OF SOUTH CAROLINA.

There were eighteen graduates at the recent commencement at the Charleston Medical College, two being from North Carolina, viz: Dr. J. L. Booth, and Dr. J. M. Hays. Dr. Booth received distinguished mention for his standing in his class.

The exercises as reported in the *News and Courier*, were very interesting, and betoken an earnest, steady advance towards a time of great success.

The address delivered to the graduating class by Dr. Carlisle, President of the Wafford College, is worthy of all praise. We cannot forbear the following quotation from his address and regret that we cannot reprint it in full:

You will be expected to remember the debt you owe to your profession. The respect paid to the medical profession is a test of the civilization of a people. A full history of the science of medicine and its leading representative men would touch most of the great currents of our civilization. The intelligent physician is led to study far-reaching questions of many kinds. Every branch of learning has had important contributions from physicians. In Alibone's great Dictionary of English Authors the number of medical writers is greater than the number of any one other department. It has been roughly calculated that for the last four hundred years the medical books and pamphlets have averaged two a day. The history of this city will illustrate the activity of the profession. Early in the last century there were more medical and scientific papers and observations published here than in any other American city. While Lining was corresponding with Franklin about strange electrical experiments, Garden and Chalmers were describing in Latin the common weeds and flowers around Charleston, for the greatest botanists in the Old World. Dr. Garden left the city exactly one hundred years ago, and was welcomed in the scientific circles of London, and given a place among the officers of the Royal Society. Later down in the century David Ramsay could write a library of volumes, and yet find time to visit Philadelphia annually to attend the old Congress, and even to preside over it, thus being for a time virtually the President of the Old Confederation. After the adoption of the new Constitution he could go to Columbia and preside over the State Senate, yet all the while keeping up an active correspondence with many distinguished men of kindred tastes, and keeping fully abreast with his own chosen profession. His celebrated preceptor, Dr. Rush, writing to a friend in this city about Dr. Ramsay, uses these very few but very emphatic words, which may well stimulate the aspirations of the young physicians of to-day: "He talks, writes, and what is more, lives well." Dr. Ramsay was the first American physician to introduce vaccination, in the case of his son, who died only a few months ago, his long life having measured the years of our century. William Charles Wells, author of the "Theory of Dew," one of the finest specimens of inductive reasoning in our language, was a native of Charleston, and it may be that some of the beautiful experiments described were tried in his garden in this city. Dalcho, the Church historian, spent the first twenty years of this century here as an active physician, before he entered that profession which looks to the moral diseases of our race. Sixty years ago Percival, the physician, poet, geologist and genius, spent a few years in Charleston, where he, no doubt, received an impulse from the influences around him. These few names are taken from a list which might be enlarged and continued, through the founders of this college down to their successors of to-day.

PROGRESS OF MEDICINE.

RETENTION OF A DETRUNCATED HEAD AND THE PLACENTA IN UTERO FOR FORTY DAYS.—This astonishing case is reported in a recent number of the *Archiv. für Gynäkologie* by Dr. Alois Valenta. The patient was 35 years old, and this was her fourth child. Labor came on at term, the child presenting with the shoulder. A medical man was called, who proceeded first to detach the lowermost arm, and then to bring down the feet. He delivered the body, but could not get the head to follow, so he cut through the neck and left the head behind. Two other doctors were then called in, but all they did was to administer ergot and advise that the patient should be taken to a hospital. This her husband would not hear of, and so nothing was done. Eight days after the medical men had seen her, a midwife was called in; but she did nothing except syringe the vagina with warm water every two or three days. The patient all the time had no bad symptoms—no rigor, no particular pain, no bladder or rectum trouble, ate well, and slept well; the only thing was that she felt weak, and that the lochia stank insufferably. Thirty-eight days after the labor the patient rebelled against marital authority, and had herself taken to the hospital. When seen there, her pulse was 72, temperature 99.5°. There was no sign of uterine action, and the uterus seem to have undergone complete involution, being spread like a thin cap over the retained head. Three days after admission, the vagina having been first repeatedly syringed with a 3 per cent. solution of carbolic acid, the cervix was dilated with sponge and tupelo tents, and repeated doses of ergot were given. This brought away discharge and small fragments of bone, but the patient felt no pain, although intermittent hardening of the uterus was perceptible. After dilatation, the bones of the foetal head were seized, as they could be got at, with strong polypus forceps, and carefully removed. The chief difficulty was found with the parietal bones, which were in such close coaptation with the uterine wall, that it was difficult to seize them, and when seized, it was necessary to double them up (a thing not easily done) in order to get them through the cervical canal. About forty bits of bone were taken away. Then the placenta, which looked quite fresh, was detached

with the finger, and removed piecemeal—a proceeding which occasioned some hemorrhage. The whole operation occupied about an hour and a half. When it was finished, the uterus was washed out with hot water, and ergotine injected subcutaneously. The patient recovered without a bad symptom. Dr. Valenta has only been able to find in literature one case resembling his. This case is recorded by Freund. In his case the detached head was retained for ten years, the uterus, as in Valenta's case, showing no inclination to expel it.—*Medical Times and Gazette*.

THE CYCLICAL PHASES OF DIPHTHERIA.—The study of the statistics of the mortality in Philadelphia brings to light a strange tendency of diphtheria to run in cycles of intensity, the period being six years. The following table indicates this clearly :

1860.....	307	1872.....	150
1861.....	502	1873.....	110
1862.....	325	1874.....	181
1863.....	434	1875.....	656
1864.....	357	1876.....	708
1865.....	260	1877.....	458
1866.....	192	1878.....	468
1867.....	119	1879.....	321
1868.....	119	1880.....	323
1869.....	182	1881.....	457
1870.....	172	1882.....	915
1871.....	145		

It is likely because of the fact that the disease prevails most markedly in the colder half of the year that the period of maximum cyclical intensity seems to last each time two years. For some reason, or reasons then, there is every sixth year an excess of persons very liable to contract the disease, and possibly, also, very liable to succumb to it. Either this, or it must be assumed that the disease becomes more virulent, that the "epidemic influence" becomes more decided—to use a phrase employed by writers who still cling to the old-fashioned way of referring diseases to mysterious causes.—*Med. and Surg. Reporter*.

NUTRITIVE PROPERTIES OF RICE.—The increase in the consumption of rice has lately attracted the attention of several men of science in Germany, and, amongst other investigations, an attempt has been made by Prof. Voit to discover the relative capacity which

various forms of nourishment possess of being incorporated into the system. He has drawn up the following table of the percentage which remains in the body, and of that which leaves it :

	Percentage incorporated.	Percentage which is not retained.
Meat.....	96.7	3.3
Rice	96.1	3.9
Eggs.....	94.8	5.2
White bread.....	94.4	5.6
Maize.....	93.3	6.7
Potatoes.....	90.7	9.3
Milk.....	88.9	11.1
Black bread.....	88.5	11.5

According to these results (the *Bremer Handelsblatt* remarks), meat and rice leave the smallest amount of residuum, and occasion the smallest excessive exertion to the digestion, and in fact introduce the minimum quantity of ballast into the human frame. Dr. König, of Münster, considers that the fact of large masses of population living on rice is easily accounted for, and in summing up the information collected upon the subject, Prof. Voit remarks that potatoes, when consumed in excessive quantity, fail to nourish the frame effectively, make the blood watery, and render the muscles weak. Apart from the subject dealt with in the table drawn up by Prof. Voit, the question of the relative nutritive value of rice and potatoes has been investigated by Dr. König, who is of opinion that if similar quantities of both articles are compared, the former possesses four times the value of the latter in really nutritive properties. It is also remarked that the introduction of rice as a substitute for potatoes is facilitated by the fact that no such variation takes place in its quality as is the case with the potato, which is liable to be materially influenced by the effects of unfavorable weather.—*Lancet*, Dec. 30, 1882.

THE STRUCTURE OF THE SMALL INTESTINE.—A histological discovery, which at first sight appears sufficiently remarkable, has just been made in the small intestine by Professor von Thanhoffer. It has been found that structures almost exactly similar to the taste-organs of the tongue are disposed amongst the villi of the alimentary

canal ; but what function can possibly be possessed by "taste organs" in such a situation is, of course, perfectly obscure (*Centralblatt f. d. Med. Wiss.*, January 20). The discovery of these bodies is entirely a matter of careful preparation and examination, osmic acid and chloride of gold being the most favorable reagents. The appearance of the organ is that of a bowl or bud, lying, as a rule, at the base of the villi, where they are mutually connected ; but occasionally they are found rather higher, or even close to the summit of the villus. Just like the taste-corpuscles, these structures vary considerably in actual size and in the relation of their height to their circumference. Their general appearance is readily described ; they consist of two layers of epithelial cells—the one external, serving as a covering ; the other layer internal, constituting the special organ. The latter are prolonged at their free extremity in the direction of a pore which lies at the apex of the bud, and some of them possess a short hair-like process. The actual connection of these peculiar organs with nerves has not yet been traced.—*Med. Times and Gazette.*

DISCHARGE, IN ABORTION, OF THE EMBRYO WITH AN INTACT AMNION, DETACHED FROM THE CHORION.—A case in which this interesting mode of abortion took place is recorded in a recent number of the *Archiv für Gynäkologie* by Dr. G. Krukenberg, of Bonn. Those interested in it will find a case fully related by Smellie ("Midwifery," New Sydenham Society's edition, vol. ii., page 66). Velpeau has also described the occurrence. In Dr. Krukenberg's case the smooth translucent sac was of the shape of a hen's egg ; weighed seven drachms ; measured, when lying flat, a little more than two inches long, rather less than two inches in breadth, and four-fifths of an inch in thickness. It was not so full of fluid as to be tense. The liquor amnii and the sac were transparent enough to allow the fœtus and cord to be seen. The fœtus was judged to be of about six or seven weeks intra-uterine age. Dr. Krukenberg enumerates four conditions which may lead to the separation of the amnion from the chorion. First, some fluid may remain between the amnion and the chorion in consequence of the amnion not having at all points come into contact with the more external membrane. Next, hemorrhage may have taken place

between the two membranes. Thirdly, a velamentous insertion of the umbilical cord, by keeping the chorion and amnion apart over the space in which the umbilical vessels run, will favor their easy separation. Lastly, imperfect development of the allantois. If this has not reached the amnion, there will be no vascular connection between the foetal membranes and the chorion, and therefore no hindrance to the separate expulsion of the amniotic sac.—*Med. Times and Gazette.*

EMBOLISM OF THE FEMORAL ARTERY FOLLOWING DIPHTHERIA.

—In the *Progrès Médical* (No. 1, 1883) we find a case of the above rare occurrence reported by M. Poupow. The patient was a little girl, seven and a half years of age, who had been under the care of M. Bouchut for diphtheria, and who had made a good recovery after tracheotomy. Eleven days after she left the hospital, her mother brought her back again, suffering from intense dyspnœa with marked pallor and some fever: these symptoms had been coming on gradually. There was no evidence of diphtheritic paralysis. There were physical signs of an effusion into the right pleura. Auscultation of the heart could not be satisfactorily accomplished, owing to the respiratory sounds being unusually loud. The day after her admission she had sharp pain in the right popliteal space; discolored patches soon appeared on the foot, which became cold, and no pulsation could be felt in the popliteal or femoral arteries. The gangrene of the foot became more and more marked, and the child died on the following day. The artery was found to be completely occluded by a clot, which was not adherent to its walls. Unfortunately, the friends would not permit an examination of the rest of the body; the reporter is therefore reduced to discussing the probable causes of this embolism. Fatty degeneration of the myocardium and ulcerative endocarditis each receive some consideration, but are rejected in favor of cardiac thrombosis, which, he points out, would explain the other symptoms in the case—the dyspnœa for instance, which might well have been due to pulmonary embolism. Whilst not denying that the probabilities seem in favor of cardiac thrombosis, we cannot forget that a case was published in our hospital reports last year (vol. ii., page 377), in which embolism of the right middle cerebral

artery took place during convalescence from diphtheria, and in which, at the post-mortem examination infarctions were also found in the spleen and kidneys, but no clot was found in the heart.—*Med. Times and Gazette.*

A PURE ALKALOID FROM THE GELSEMIUM SEMPERVIRENS.—Gelsemium has always been a rather disappointing remedy ; highly successful in one case, it yet fails completely to give any relief in another, and apparently similar, case ; hence it has come to be very generally regarded as untrustworthy. Some of this uncertainty may probably depend on variations in the purity or mode of preparation of the tincture or extract.

Wormley and, subsequently, Sonnenschein, had obtained from the root an alkaloidal substance named gelsemine, but this body was apparently not pure, and did not yield crystalline salts. In a paper read before the pharmaceutical Society on February 7th, Mr. A. W. Gerrard described a process by which he has obtained a pure crystallizable gelsemine, which yields crystalline salts. It is colorless, and gives no color-reactions with nitric or sulphuric acid, so that in its chemical behaviour it bears a pretty close resemblance to strychnine ; its formula is $C_{12}H_{14}NO_2$. There seems to be little doubt that this is a stable constant body ; and as Mr. Gerrard details the various steps of the process by which it may be obtained, with fulness and precision, there is no reason why the alkaloid should not become an article of commerce, and gradually displace the imperfect and inconstant preparations at present in use in pharmacy.—*British Medical Journal.*

DILATATION OF THE NECK OF THE UTERUS.—M. Chassagny, of Lyons, in a communication made to the Paris Academy of Medicine, describes his method of thoroughly plugging the vagina, and producing rapid dilatation of the neck of the uterus. He places in the vagina a bladder, with which an India-rubber tube is connected ; this, with the help of a siphon, conveys into it the water contained in a receptacle placed about two feet and a half higher than the pelvis of the patient. The bladder becomes distended by the water, and soon fills the vaginal cavity. This brings on abundant secretion, and induces energetic contractions resulting in the

physiological dilatation of the os uteri, which is quickly completed by the mechanical action of the bladder. The bladder is placed in the vagina, and the occlusion of the vulva is obtained by means of an apparatus which M. Chassagny calls the *Elytroptérygoïde* wings) in the vagina). It consists of a cylindrical speculum, which holds the bladder; this is forced out as the water enters, and the act of distension separates the valves of the speculum, which resting on the sides of the pelvis, prevent the expulsion of the apparatus and of the bladder. M. Chassagny mentions, in his pamphlet, several instances of induced premature labor, in cases of contracted pelvis, obstinate vomiting, eclampsia, etc. M. Chassagny describes two cases of vicious insertion. In both cases, he induced labor before the natural period by having recourse to rapid dilatation. There was not the slightest hemorrhage, and two living infants were born. In another case, where the mother was in the last stage of suffocative catarrh, M. Chassagny effected, in half an hour, the safe delivery of a living child. The mother rallied for a few moments only. In *post partum* hemorrhage, the bladder, by completely filling the uterine cavity, closes the openings of the vessels, and, by artificially restoring the pregnant state, determines uterine contraction. The water in the bladder slowly flows away, until the uterus is thoroughly contracted.—*British Medical Journal*.

EPITHELIOMA OF THE CERVIX REMOVED DURING PREGNANCY WITHOUT CAUSING ABORTION.—At the meeting of the Obstetrical Society of London held February 7, 1883, an account of this case was read by Dr. Godson. The patient aged 35, had suffered twelve months from yellow or watery fetid discharge, latterly from hemorrhage and occasional pain. Until then she had been healthy. The cervix was enlarged and ulcerated; the uterus was mobile. The cervix was removed by the écraseur four days after the cessation of hemorrhage believed by the patient to be menstrual; no bad symptoms followed. Nine days after the operation a sound was passed into the uterus, and four days after this the foetus, of about eight weeks' development was expelled. The author remarked that he believed the abortion was due to the use of the sound, and not to the operation. He advocated the removal of cancerous growths, if possible, at any stage of pregnancy. His case supported the

view that cancer favored the occurrence of pregnancy, the patient not having been pregnant for six years previously. He remarked on the patient's previous good health, the late onset of pain, and the importance of not pulling down the cervix when using the écraseur.—*The Lancet*, Feb. 24, 1883.

THE VENOM OF THE COPPERHEAD.—Dr. Isaac Ott draws the following conclusions from an experimental study of the subject :

1. The venom of the copperhead is weaker in toxic activity than that of the rattlesnake.
2. The heart, with both kinds of venom, becomes greatly prostrated, and in rapid deaths is their main cause.
3. The venom of either snake does not affect the sensory nerves.
4. The sensory centres are affected by both venoms.
5. The muscular excitability continues to be little affected at the time of death by the poison of the copperhead.
6. The two venoms greatly resemble each other in physiological activity.
7. The cardiac force, rhythm, and frequency are lowered by both venoms.
8. The arterial tension is greatly lowered by both venoms.
9. The blood, after copperhead poisoning, shows no microscopic changes of its globules, or any difference in its spectrum.—*Virginia Medical Monthly*, February, 1883.

AN IMPROVED METHOD OF CIRCUMCISION FOR CONGENITAL PHIMOSIS.—Dr. Neil McLeod recently operated on a child of two years, in whom the orifice of the prepuce scarcely admitted the point of a probe, but by dilating this orifice forcibly with "sinus forceps," and the addition of a few tiny snips with scissors round the margin of the orifice thus dilated, the foreskin could be drawn back until the point of the glans showed itself. Further retraction was prevented by the adhesions referred to, but these were easily broken down by means of a probe passed between the prepuce and the glans, and this done until the corona glandis was exposed in its whole extent. The prepuce was next replaced forwards, and the amount to be cut off was marked by a clip arrangement made by tying two ordinary directors, groove to groove,

at one end and slipping the prepuce into the clip formed by the untied ends. Three carbolized silk threads were then passed through the prepuce at equal intervals close to the clip on its proximal side, the glans being guarded as the needle was passed, and each thread being of sufficient length to form *two* sutures. The prepuce in front of the clip was then cut close off, the clip separated, the penis released, vessels twisted, the threads fished up with a blunt hook from the now enlarged preputial slit, cut and then tied on each side. The orifice in the inner or mucous layer of the prepuce can then be slit with scissors down to the corona, but this is unnecessary if the clip is put on so that the line of section runs in the direction from the corona to the orifice of the urethra.

The surface of the glans being annointed with vaseline, a plug of absorbent cotton dipped in one to twenty solution of boroglyceride made an excellent dressing, and was kept applied by a bandage passed round the abdomen, knotted behind, and the two ends brought forward between the legs over a piece of light macintosh or oiled silk, the bandaged ends diverging so as to include the genitals, then converging and being looped through the bandage crossing the abdomen. The absorbent pad was changed every time that urine was passed. Healing took place by first intention, and not a trace of odor was detected from first to last. Carbolyzed catgut sutures would have been better than silk, as they do not need to be removed.—*Edinburgh Medical Journal*, March, 1883.

ARTIFICIAL HUMAN MILK.—The method of preparation of artificial human milk as recommended and used by Prof. Frankland is as follows: Let one-third of a pint of new cow's milk stand twelve hours, then remove the cream, and add to it two-thirds of a pint of new milk as fresh from the cow as possible. To that one-third of a pint of blue (or skim) milk left after taking away the cream, add a piece of rennet (about one square inch in size) which, after it has served its purpose, can be taken out and used daily for a month or two, and, and allow the vessel holding the skim milk to be placed in warm water and there remain from five to fifteen minutes, until curdling is effected. Break up the curd repeatedly and carefully separate the *whole* of the whey, which should then be rapidly heated to boiling in a small tin pan, placed over a spirit or

gas-lamp ; during this heating a *further* quantity of casein (technically termed "fleetings") separates, and so straining after this, through fine muslin, is then required. Now dissolve one hundred and ten grains of powdered milk sugar in *hot whey*, and mix it with two-thirds of a pint of new milk as before prepared with extra cream. This gives us one pint of artificial human milk, which should be used *within twelve hours* after its preparation ; all vessels and apparatus concerned in the manufacture being kept scrupulously clean.—*Physician and Surgeon*, January, 1883.

THE EXCRETION OF LIME SALTS IN PHTHISIS.—This subject, which possesses clinical as well as pathological interest, inasmuch as it bears upon treatment, has once more been investigated by Prof. Senator, of Berlin (*Centralblatt f. die med. Wiss.*, 1883, page 11). It is no new observation that the amount of lime in the urine is increased in phthisis, but Schetelig had recently questioned the correctness of the conclusion. Both relatively and absolutely, however, the calcareous salts appear to increase in the urine during tuberculosis. There are very wide limits within which the amount of this excretion varies in health, viz., from .081 to .77 grammes in twenty-four hours. Still, this maximum, even, is exceeded in phthisis ; and the continuous observation of an individual over a lengthened period also demonstrates a positive increase. The source of the lime salts cannot be found in the food, neither can it be referred to the wasting of the lungs, for these organs actually show an increase, and not a diminution, of their calcareous constituents when tuberculous. Senator suggests that the bones are to be credited with the excessive discharge, inasmuch as they manifestly waste in phthisis ; the yellow marrow becoming red, and the lime salts being very probably set free in the process.—*Medical Times and Gazette*, January 20, 1883.

VACCINATION DURING PREGNANCY : ITS EFFECT ON THE FŒTUS.—A recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie* contains a laborious article by Dr. Carl Behm, of Berlin, on the above subject. The question whether the blood-changes wrought by vaccinia germs affect the fœtus in utero as well as the mother has been a good deal discussed on merely theoretical

grounds. Bollinger formulated the doctrine that the placenta formed a kind of physiological filter by which corpuscular matters in the maternal blood were held back, and prevented from contaminating the fœtus. But since then Spitz and Albrecht have detected the spirillum of relapsing fever in the blood of the new-born infant—an observation which appears to refute the dogma of Bollinger. He has, consequently, since retracted the proposition; and, believing it possible for blood-poisons, whether corpuscular or not, to pass from the mother to the fœtus, he has stated that when a pregnant woman is successfully vaccinated the fœtus participates in the infection, and, it of course follows, in the protection conferred thereby. The same view has been taught by Curschmann. These conclusions are supported by certain published cases in which the vaccination of children, whose mothers had been vaccinated during pregnancy, was effected without result. Isolated cases, however, prove nothing, for the failures may have been due, for instance, to bad lymph, or to unskilful performance of the operation. The most numerous observations are those of Burckhardt, who vaccinated twenty-eight pregnant women; but, of their children, in only eight was the inoculation successful. This series, however, was not tested, as it should have been, by the vaccination, with precisely the same kind of lymph and in the same manner, of children whose mothers had not been vaccinated during pregnancy. Opposed to these are the observations of Gast, who vaccinated 16 mothers during pregnancy, and subsequently every one of their children, with success. This divergence in the results of experience led Dr. Behm to investigate the matter. He vaccinated 47 pregnant women, but was only able to get at the children of 33. Of these 33 mothers, 22 were vaccinated in the tenth lunar month of pregnancy, 10 in the ninth, and one in the eighth. In 4 the vaccination was ineffectual, in 3 of them the non-success being proved to be due to the lymph employed. In the remaining 20 pregnant women successfully vaccinated, in 7 the vesicles were not good, but in 22 the inoculation produced perfect and typical vaccine vessels. Of the 33 children, 25 were vaccinated successfully, 8 unsuccessfully. Of these failures, 6 were (by test vaccinations on other children) shown to be due to bad lymph. In 1 of the other two the lymph used, although it produced vesicles in other children, did

not produce good ones. In the remaining case the lymph employed was good and potent. But this case, Dr. Behm remarks, ought to be tested by repeated inoculations before concluding that the non-success was due to protection acquired in utero from the vaccination of the mother. The children of the four mothers in whom vaccination had failed were vaccinated with perfect success. Of the remaining 21, in 15 perfect vessels were the result; in 6 the vesicles were slightly modified, being few in number or small, but all ran a typical course. Dr. Behm therefore concludes that vaccination of the mother during pregnancy has little, if any, influence on the foetus; but it is possible that it may sometimes protect the foetus. He concludes with an argument for the re-vaccination of pregnant women, and the vaccination of infants as early as possible.—*Medical Times and Gazette*.

VACCINATION DURING PREGNANCY.—Dr. Martin showed a specimen of a foetus which had contracted vaccinia in utero from the mother. Illustrates Dr. Meigs' statement that "vaccination during pregnancy is murderous."—*Boston Med. and Surg. Jour.*

NEGATIVE EFFECT OF VACCINATION ON FŒTUS.—In the *Maryland Medical Journal*, January 15, 1883, Dr. Powell reports the case of a lady in the eighth month of pregnancy, whom he vaccinated successfully. Since her confinement her child has been vaccinated and has had a typical crust and scar, showing the absence of any protective influence from the mother's vaccination.

[OIL OF] TURPENTINE: ITS NATURE AND ADULTERATIONS.—We find in the *American Journal of Pharmacy* (March, 1883, p. 146) a contribution from the pen of Prof. Henry E. Armstrong, Ph.D., F.R.S., London, on the chemistry of oil of turpentine, and the nature of its adulterations.

It will be remembered that the descriptions which have done service for the past twenty years in works on materia medica and general chemistry, chiefly followed Mr. Olmstead, "Journey in the Seaboard Slave States," were erroneous and that earlier descriptions by Michaux, (1817) lacked minuteness as to chemical characters.

Prof. Armstrong has investigated oil of turpentine from the tanks of the largest dealers in the world, Messrs. Ingall, Phillips & Co., of London, and has recently given the results to the "Journal of the Society of Chemical Industry."

He has carefully compared the American and French oils. In so far as general properties are concerned" he says, there is practically no distinguishable difference, other than in color, I believe, between various samples of the commercial article, but tested by the polarimeter they vary considerably.

"Most of the [oil of] turpentine from Wilmington, the chief port of shipment, like that of Bordeaux is of remarkably uniform quality." * * * * "French turpentine is slightly less readily oxidized, absorbing oxygen somewhat less rapidly than American turpentine, but the difference is probably insufficient to make itself felt in practice."

The polariscopy of the various samples of oils, establishes standards, whereby adulteration with petroleum products may be detected. Wilmington oil (spirits) of turpentine is dextrogyrous while the French oil is lævogyrous, which may be accounted for by the difference in the species of pine in the two countries. We would infer from Mr. Armstrong's chemical account, that American oil has the same property as French, of forming an insoluble and harmless compound with phosphorous, notwithstanding the doubts expressed by a recent toxicologist.

We merely desire though to give this reference to a paper which may have special interest for some of our readers.

CHLORAL HYDRATE AS A VESICANT.—Dr. F. D. Ritter, of Gâines, Pa., writes to Dr. T. Gaillard Thomas, as follows: "In complying with your request, I write you concerning my experience with chloral hydrate as a vesicant. Some three years ago I accidentally discovered that when powdered chloral, sprinkled upon ordinary adhesive plaster and melted by a gentle heat (not more than enough to cause the plaster to adhere to the flesh), is applied while warm to the part where the blister is wanted, within three minutes a gentle heat is felt, increasing in intensity for about three minutes more until it is like a burn, then gradually easing off, until, at the end of ten minutes, the parts feel free from pain. The secondary

effect is soothing ; in some instances within half an hour a second burning is felt, though not so intense as at first, nor so lasting. If, at the end of 10 minutes, or as soon as pain has subsided, the plaster be taken off, the surface is found as effectually denuded as by a cantharidal plaster after six hours, though the discharge is not so great. Thus, within ten minutes the work of an old-fashioned blister is accomplished ; and the great advantages of the chloral plaster over the cantharidal are: 1st. Its rapidity of action, thus relieving pain, and producing the counter-irritation upon an engorged organ before the congestive action has had time to pass into more than the congestive stage; 2d. Its ease of application; 3d. It need never be taken off to have the blister dressed ; but the original plaster may remain until the sore is entirely healed, and the plaster loosens and comes off itself. This is in part my experience, and I would have given it to the profession before, but supposed it was well known."—*N. Y. Med. Jour.*

PISCIDIN—THE ACTIVE PRINCIPLE OF JAMAICA DOGWOOD, (*PISCIDIA ERYTHRINA*)—Dr. Edward Hart, Ph.D., Easton, Pa., has discovered what he claims to be the active principle of Jamaica dogwood, by a process which he gives in detail in the *Therapeutic Gazette*, March, 1883.

He obtains *piscidin* in small, nearly colorless, crystals, of 4—6 sided prisms. It is insoluble in water, easily soluble in chloroform, and benzine. No therapeutical tests are given by Dr. Hart, to show it to contain the active principle.

ON THE PRACTICAL APPLICATION OF SPONGE-GRAFTING.—Prof. Hamilton, of Aberdeen, whose articles on Sponge-grafting we copied last spring, writes to the *British Medical Journal* the following in regard to the practical application of the procedure :

The first experiments I made were by placing a thick slice of sponge in the wound, sufficient to at once fill up the gap caused by the loss of tissue. There are several objections to this procedure, the chief being that a mass of sponge three-quarters to one inch thick, placed over a suppurating wound, becomes soaked with pus, and prevents any free drain from taking place. The pus so accumulated is almost sure to putrefy, and so interferes with the process of organization going on in the deep layers. The danger of contact of such a putrefactive mass with an open wound, although less in the case of one that is granulating, is probably not to be underestimated.

I have, accordingly, generally found that in such cases it is necessary to cut off the superficial parts of the sponge, leaving the thin layer, which had become infiltrated with organizing tissue, adherent. All this inconvenience can be avoided by adjusting the sponge in successive thin layers over the wound. These layers are not more than an eighth of an inch thick, and must be cut in large slices with a perfectly regular surface. The only method I know by which this can be accomplished is by means of a freezing microtome. I happen to possess a large microtome suited for the purpose, which I employ for cutting sections of the entire brain. It holds an entire Turkey sponge, and when the latter is frozen the whole mass can be cut into perfectly regular slices of any desired thinness. Such a layer can be laid with the greatest facility over the wound, so as to fit into all its irregularities. In a few days the first layer becomes organized. A second can then be placed over this, and so on, a mass of tissue being thus, in course of time, built up. There is no bagging of pus by this method of applying the sponge, and the danger of putrefaction occurring is reduced to the minimum.

Another precaution that is necessary is, to see that where the wound is granulating the edge of the layer of sponge does not come into contact with the pellicle of young epidermis at the side. If so, the epidermis will undermine it and cause displacement. There ought to be one interval of about an eighth to a quarter of an inch between the edge of the epidermis and that of the sponge.

Dr. Sanctuary, in the *Journal* of December 16th, makes the remark that firm pressure is a *sine qua non* in obtaining adhesion. I agree with him so far that when first applied there ought to be firm and equable pressure all over the surface; but I question, after adhesion has once taken place, whether pressure exerts a salutary influence in promoting organization. On the contrary, I should consider that the interstices of the sponge would fill up quicker if the vessels of the granulating part had free play. I should almost say that in the treatment of a granulating wound of the lower extremity it would be advantageous, when the sponge has once taken firm hold, to allow the limb to hang downward, and probably to encourage the patient to take gentle exercise. By this latter means the circulation through the granulation loops will be rendered active; and a certain amount of vascular turgescence is what is really required.—*Amer. Practitioner*.

PARKE, DAVIS & Co.'s EMPTY CAPSULES.—The empty capsules of Parke, Davis & Co., of Detroit, are admirably adapted for the administration of nauseous medicines, and deserve to be more generally known. It is simpler to place the requisite dose in one of these capsules than to make it into a pill, or even to give it in the form of powder. The capsules are made of a pure tasteless gelatine, which dissolves with the greatest readiness. We have given them an extensive trial, and have every reason to be pleased with them. They are made of various shapes and sizes, so that, when filled, they may be given by mouth, or may be used as medicated pessaries or suppositories.—*Brit. Med. Jour.*

THE LONDON WATER SUPPLY.—Dr. Percy F. Frankland remarks, with regard to a table showing the proportion of organic impurity present in Thames water, as delivered in London year by year, from 1868 to 1881: “This table clearly and irresistibly attests the general deterioration which has taken place in the average quality of the Thames water delivered in London. It must further be borne in mind that this deterioration has gone on in spite of both greater storage capacity and much improved filtration on the part of the companies. What is here stated of the Thames applies equally, but in a less degree, to the water of the Lea. Since this, then, is the condition of the water which the companies have the monopoly to purvey, too much caution cannot be exercised in accepting the wholly unofficial reports which are now made in the interests of the water companies, and which are calculated to allay the just cause of dissatisfaction excited by the official and impartial examination made by the Local Government Board in the interests of the public. It should not be forgotten that even when their supplies were drawn from the grossly polluted lower Thames, the water companies were able to procure from scientific experts reports of the perfect wholesomeness and unimpeachable purity of their water. Thus, reporting to the Southwark Company upon the quality of Thames water between Teddington and Chelsea, and three chemists pronounced the water to be “as perfectly harmless as any spring water of the purest kind used in common life; indeed, there is probably not a spring, with the exception of Malvern and one or two more, which is so pure as the Thames water.” Again, at a more recent date, the Thames water at Battersea, then in close proximity to the sewer outfall, was described as “good, wholesome and proper, free from any noxious impregnation of animal matter, and well adapted to dietetic, domestic and manufacturing uses. Until the year 1852, the inhabitants of London were content, or rather compelled, to drink the water of the Thames drawn from the river opposite Hungerford Market, and all legislation intended to alter the then existing state of things was strenuously opposed by the water companies. The consternation caused by the terrible epidemic of cholera in 1849, so aroused public opinion that an alteration of the source of supply was insisted upon. It is to be hoped that the public will

not require an equally severe lesson before they insist that the Thames and the Lea shall be altogether abandoned for the purpose of furnishing water to London, and that the day may not be far distant when the whole of the metropolis shall enjoy a supply of water as pure as that which is now given to a limited portion of the southeastern district only.”—*British Medical Journal*.

THE STRUGGLE FOR A LIVING.—We quote the following from a presidential address to the Maine Medical Association by the late William Warren Greene, M.D.:

“Witness the large number of doctors in every city struggling for a mere existence, and see how few out of the whole number really do the work. See how in almost every country village a full practice for one or two good men is piece-mealed by sharp and often acrimonious competition to the detriment of all.

“It would seem that in a calling so high, so noble, so sacred, men fit for such ministry should be sought for; but the great question of the young graduate is not ‘Who needs me?’ but ‘Where can I get a living?’ In the case of four physicians dying, each in a country village, during the last year. I am credibly informed that in one instance two, in another three, in the third five, and in the fourth case seven new men came to look the field over within ten days after the doctors’ death, sometimes before the burial. In one case two attended the funeral, and in another the widow had three letters from aspirants for the vacant place while the dead body of her husband still lay in the house.

“It is a hackneyed saying, with which too many ears are tickled, that ‘there is always room for good men.’ Applied to the present condition of our profession it is false. Were only good men and the best men admitted it would undoubtedly be true. But all over the land, in city and country, are well educated, cultured gentlemen, honest and loyal, striving in vain to secure a competence—yes, a bare living even—and too often is disappointment mingled with shame and mortification at the success of ignorant and unprincipled rivals. I have said that the evil results of this excess in numbers are manifold. It leads to over-practice and bad practice. The man who is hard pushed, who has few patients and needs more, is tempted to make much or little; to magnify the importance of his

cases, both in his own mind and to his patrons; to make uncalled-for visits, and to give too much medicine; and unnecessary medication soon ceases to be rational. Patients are injured in mind and body. The community is injured by teaching the people to attach undue importance to trivial diseases, and to overestimate the value of treatment therein. Legitimate, honest practice suffers in reputation; money is obtained under false pretences."—*New York Medical Record*.

POINTS IN THE TREATMENT OF URINARY ABSCESS, STRICTURE, AND EXTRAVASATION OF URINE.—Reginald Harrison advocates the treatment of abscess in the perineum, complicating tight stricture of the urethra, with or without extravasation of urine, by free incision and the introduction and retention of a short straight catheter into the bladder retained by a T bandage. He concludes—
1. That in all cases of perineal abscess and extravasation of urine, associated with organic stricture of the urethra, perineal urethrotomy behind the stricture should be practiced, and provision made for the direct escape of urine by the insertion of a tube into the bladder from the wound. 2. That the treatment of the stricture should be postponed until the more urgent symptoms of abscess and retention or extravasation of urine have been relieved.—*Lancet*.

THE SALICYLATES AND HEMORRHAGES IN ENTERIC FEVER.—Dr. James Fergusson, of Perth, writes, "At the time when salicylic acid and its compounds are receiving so much attention, the following facts may be regarded as at least worthy of statement:

"Last year, while resident in the infirmary here, I had an opportunity of testing the efficacy of certain drugs as antipyretics in enteric fever. These agents were used successively, each over a group of cases, and included the salicylate of soda. The latter had not been long in use when an increased frequency of hemorrhages from the bowel raised the question, Could the salicylate be favoring the production of that complication of the malady? Whether it were or not, the suspicion aroused dictated the withdrawal of the salt from use in cases of typhoid. Shortly afterwards, I noticed that a foreign observer had reported the salicylate of bismuth, and,

I think, also salicylic acid (though of the latter I cannot be certain, as I am not able now to find the report in question), to cause nasal and intestinal hemorrhages. The subject would not have been revived by me at present but for the recent experience of my successor in the resident's office of the above-mentioned institution, D. H. McLean Wilson, who joins me in placing the facts before the public. Dr. Wilson, in having recourse to the soda-salt in typhoid, found the same striking frequency of hemorrhages to follow closely. His employment of the agent differed from mine, in that he administered small doses of 10 to 15 grains frequently over the twenty-four hours, while I gave half-drachm or drachm doses at longer intervals apart. In the other respect, however, our experiences have been so similar as to warrant the facts being brought under notice, so that the important practical question involved may, if possible, be decided by the evidence of a number of observers."—*British Medical Journal*.

INFLUENCE OF FOWLER'S SOLUTION UPON THE HÆMOGLOBIN IN THE BLOOD.—From an investigation made to determine the effects of the medicinal administration of some remedies upon the proportion of hæmoglobin in the blood, Dr. Fenoglio, of Turin, concludes that the iron preparations vary considerably in their effects; Fowler's solution increases the hæmoglobin, and this becomes more marked the longer it is given. In spite of the general opinion to the contrary, the administration of Fowler's solution is indicated in anæmia, chlorosis, and in general in all conditions in which there is a decrease in the hæmoglobin, for the influence of this agent is very evident in increasing the proportion of the hæmoglobin; and, furthermore, its use increases the appetite and produces a general improvement in the bodily appearance and condition.—*Medizin. Jahrbücher*, 1882, H. iv.

THE ASSOCIATION OF MEDICAL EDITORS.—This Association will meet in Cleveland, Ohio, simultaneously with that of the American Medical Association, on the 5th and 6th June, 1883. Dr. N. S. Davis, the President of the Association, on "*The Present Status and Tendencies of the Medical Profession and Medical Journalism*." A free discussion on this important subject is invited.

Dr. Henry O. Marcy will deliver an address on "Journalism Devoted to the Protection and Concentration of Medical and Surgical Science in Special Departments."

We believe these meetings have been slimly attended heretofore, and we trust that the present interesting programme, and a wise management of time so as not to conflict with the meeting of the American Medical Association, or not to be placed too early in the week to permit members from afar to meet the appointment.

Dr. John V. Shoemaker, the Secretary of the Association, through whose kindness we have received our information, says that the meetings will be held in the interval between the meetings of the Sections of the American Medical Association and the social entertainments of the evening.

OTITIS MEDIA PURULENTA.—Professor Dudley S. Reynolds, Louisville, Ky., thus summarizes in a lecture reported for this *Journal*:

Unable to go more fully into the subject, I feel that, from the cases before you, two important points as to local treatment, or rather as to the action of the local agents, should be mentioned more particularly. First, there is in such cases the necessity for an agent which has the power to dissolve the fibrinous matters upon the surface of the inflamed mucous membrane, and immediately following this, an agent which has gently stimulating, astringent and antiseptic powers. The first agent as you have seen, is found in the chloride of sodium, the second in listerine. Listerine is something more than an antiseptic, which its inventor, Mr. Lambert, has very extensively advertised as its chief virtue. It is a stimulating, balsamic astringent. It contains boracic acid, the essential oil of encalyptus globulus, thymol and some other less important ingredients. It mixes freely with water, and may be used as a local application to all purulently inflamed surfaces, diluted to any extent desirable, or as in the cases before you, in full strength. With chloride of sodium and listerine, you have, therefore, but little to desire in the way of local applications in otitis media purulenta.—*Philadelphia Medical and Surgical Reporter*.

HYDRASTIS IN GONORRHŒA.—Dr. A. W. Bixbey, reports several cases of gonorrhœa, in the *American Medical Journal*, April, treated chiefly by hydrastis. This is not by any means a new remedy, but it is not in general use, and one reason we suspect is, that it has been too frequently misapplied.

One of the injections suggested is

R. Hydrastis sulphatis, gr. x., glycerinæ, ʒj., aquæ destillat, ʒiij. M. Use by injection every 3 hours.

CORRESPONDENCE.

A WORD FOR QUAACKS.

Mr. Editor :—I was made sorry, very sorry, to see in the last NORTH CAROLINA MEDICAL JOURNAL, an attack upon Quaacks, because a certain Mr. R., a quaack, had applied a remedy to the face of a Mrs. K., which caused her death !

The time has been, Sir, when such a paper would have suited my ideas exactly, and I would have endorsed every word of it ; but I have gained a little more wisdom with age, and have become somewhat more of a philosopher, so that now I am disposed to leave them alone, because they are doing a splendid work, and are really very useful to the regular physician.

I am persuaded that nothing so helps a good physician as the failures of the quaacks in his neighborhood, nothing brings out his success in any case to greater advantage, than to have *similar cases killed* every now and then by some quaack.

And our religious papers act upon the same principle, for how else could they publish what they know to be the lying advertisements of arrant quaacks, unless it be that the *large pay* which they get for so doing, affords them better opportunities for disseminating the seeds of pure gospel truth to a benighted world ?

Mrs. K. is gone to the grave from her own folly, and a quaack's ignorance, her neighbors have sung her requiem, and now mourn her loss, but they have learned a very *useful lesson* for which we are bound to thank the quaacks.

Now, then, if the quaacks help the regular physician, and promote true religion by liberal pay are they not deserving of some consideration ? Will not the ends justify the means ? Perhaps, some one will think I am only jesting, may be, I am, possibly I am not, but whether I am or not this much I freely grant, that when I read the first two pages of my religious weekly I am piously inclined, but when I get on the third and fourth pages among the miserable quaack advertisements no one would suppose that I was *so much so* judging either by my looks, or by my expressions !

There is another very potent reason why quaacks are needed in North Carolina. The last census has shown (and the action of the

General Assembly with regard to our Board of Health but confirms it) that North Carolina is further behind in education than any other State, consequently we have a very large number of very ignorant persons in our State to be cared for, and as Jesse Holmes, the fool-killer, is dead, I know of no better way of disposing of them than to give the quacks a fair showing. Let them flourish like the green bay-tree; let them prescribe *ad libitum* for all who are foolish enough to call upon them, and the time is not far distant when wise men shall cease to mourn over the untimely death of the aforesaid Holmes; because his unfinished work shall have been most happily consummated, and North Carolina will not be called the Rip Van Winkle of States. All except *seven* of our Senators are in a lamentably low *sanitary* condition, and first class quacks would find it to their advantage to call upon them! They are evidently in a very bad state, very far behind the times both mentally and physically so far as all hygienic measures are concerned, and I am of the opinion that could they be turned over to the quacks of the land, we might confidently expect that our next Legislature would be made up of *better material*—men of broader views, higher culture, and more advanced in civilization! I am ashamed of them, because they have made North Carolina a laughing stock for all intelligent nations and peoples by their vote on the Board of Health bill, and the time will come when they will be ashamed of their own record!

Hydrophathy, and the Turkish bath with general shampooing (all quack inventions) are all sadly needed in North Carolina, and no less so, by our Senators than by many other men!

Give the quacks a fair showing and some good will come of it!

Respectfully,

R. L. PAYNE, M.D.

Lexington, N. C.

WANTED.—A complete set of the Transactions of the Medical Society of North Carolina, for which a reasonable price, or a valuable exchange in books will be given.

Those who have partial sets which they would like to dispose of would do well to communicate with EDITOR OF THE JOURNAL.

WOOD'S LIBRARY.

Wood's Library of Standard Medical Authors which we give below is specially attractive for 1883. The price will continue to be, the current year, as heretofore, by subscription only, at \$15 a year.

Manual of Gynecology. By D. Benj. Hart, M.D., F.R.C.P.E., and A. H. Barbour, M.A., B. Sc., M.D. Illustrated. Volumes I and II.

Handbook of Electrotherapeutics. By Dr. Wilhelm Erb, Professor in the University of Leipzig. Illustrated by 39 wood engravings.

The Microscope and its Revelations. By Wm. B. Carpenter, C.B., M.D., LL.D. Sixth Edition. Volume I. Illustrated by one colored plate and about 16 plain plates, and upwards of 300 fine wood engravings.

The Microscope and its Revelations. By William B. Carpenter, C.B., M.D., LL.D. Sixth Edition. Volume II. Illustrated with about 10 plates and upwards of 200 fine wood engravings.

Diseases of the Oesophagus, Nasal Cavities, and Neck. By Morell Mackenzie, M.D., London.

The Diseases of Women, a Manual for Physicians and Students. By Heinrich Fritsch, M.D., Professor of Gynecology and Obstetrics at the University of Halle. Translated by Isidore Furst. Illustrated with 150 fine wood engravings.

The Treatment of Wounds, being a Treatise upon which the Treatment of Wounds should be founded, and on the best methods of carrying them into practice, including a consideration of the modifications which special injuries may demand. By Lewis S. Pilcher, A.M., M.D., of Brooklyn, N. Y. Illustrated by wood engravings.

Hereditary Syphilis: Its Pathology, Treatment and Differential Diagnosis. By F. R. Sturgis, M.D., Harv., Member of the Academy of Medicine, Ophthalmological Society, Dermatological Society, N. Y. Clinical Society, Visiting Surgeon Charity Hospital, New York, etc. One Volume. Illustrated with one chromolithograph and several fine wood engravings.

Legal Medicine. By Charles Meymott Tidy, M.B., F.C.S.,

Master of Surgery. Professor of Chemistry and of Forensic Medicine and Public Health at the London Hospital, Medical Officer of Health for Islington, Late Deputy Medical Officer of Health and Public Analyst for the City of London, etc. Volumes III and IV.

A Treatise on Veterinary Medicine as Applied to the Diseases and Injuries of the Horse. Compiled from standard and modern authorities. By F. O. Kirby. Illustrated by 6 chromolithographic plates, containing numerous figures and about 150 fine wood engravings.

OBITUARY.

WILLIAM HOLME VAN BUREN, M.D., LL.D.

The announcement of the death of Prof. W. H. VanBuren, M.D., which took place in New York city on the 28th inst., has been expected for many weeks past, but none the less does it cause sorrow and regret among the large number of physicians all over the Southern States, who received their surgical education from him. Dr. VanBuren was 64 years of age.

Dr. VanBuren was in the army, for a short time, resigning in 1845. He then took up his residence in New York city, and was made one of the surgeons of Bellevue Hospital at its organization in 1847. In 1852 he succeeded Prof. Granville Sharp Pattison, as Professor of Anatomy in the University of New York. Other hospital appointments rapidly succeeded his accession to the chair of anatomy. He also filled the chair of surgery in the University of New York for many years.

Dr. VanBuren was not a voluminous writer. He was joint author with Dr. Isaacs in the translation of Bernard and Huetten's work on Operative Surgery. He published his "Lectures on Diseases of the Rectum." In connection with Dr. E. L. Keyes, in 1874, he published "A Text-Book on the Genito-Urinary Organs."

Dr. VanBuren was one of the founders of the "Sanitary Commission," which did so much during the war towards bettering the condition of the soldiers.

He is most affectionately remembered by his old students in the South for his kindly personal interest in them; and his great talent as a lecturer particularly his rare descriptive powers, has given him a place in their memory as an unsurpassed lecturer.

BOOKS AND PAMPHLETS RECEIVED.

Report of the Board of Health of the City of Newburyport, Mass. 1882.

Annual Report of the Health Officer of the City of Burlington, Vt., to the City Council. January 1, 1883. Burlington: R. S. Styles, Steam Book and Job Printer, 1883.

Proceedings of the Ninety-Third Annual Session of the Medical Society of Delaware, held at Rehoboth, Delaware, June 13th, 1882. Milford, Del.: Corsa & Townsend. 1882.

The Fortieth Annual Report of the Mount Hope Retreat. For the Year 1882. By Wm. H. Stokes, M.D. Baltimore: Printed by John Murphy & Co., 182 Baltimore Street. 1883.

The Percentage of College-Bred Men in the Medical Profession. A Paper read before American Academy of Medicine, October 27th, 1882, by Charles McIntire, Jr., M.D., of Easton, Penn.

Fourth Annual Report of the State Board of Health of South Carolina. For the Fiscal Year Ending October 31, 1882. Columbia, S. C. : Charles A. Calvo, Jr., State Printer, 1882.

Annual Address before the New York Medico-Chirurgical Society. By the President, Dr. E. P. Fowler. Delivered November 4th, 1882. Reprinted from the Society Transactions. New York. 1883.

Headaches : Their Nature, Causes, and Treatment. By William Henry Day, M.D. Fourth Edition. With Illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1883.

The School of Salernum. An Historical Sketch of Mediæval Medicine. By H. E. Anderson, A.M., M.D. Read before the Medical Society of the County of New York, Feb. 25, 1878. New York. 1883.

First Annual Report of the State Board of Health of Indiana. For the Fiscal Year Ending October 31, 1882. To the Governor. Indianapolis : Wm. B. Burford, Printer, Lithographer and Binder. 1883.

Fifth Biennial Report of the Trustees, Superintendent and Treasurer of the Illinois Southern Hospital for the Insane, at Anna. October 1, 1882. Springfield : H. W. Rokker. State Printer and Binder. 1883.

First Report of the State Board of Health to His Excellency, Thos. J. Churchill, Governor of the State of Arkansas, from its organization, April 27th, 1882. By Authority. Little Rock: Printed by Mitchell & Bettis, State Printers. 1883.

A Practical Treatise on Diseases of the Skin for the Use of Students and Practitioners. By James Nevin Hyde, A.M., M.D., Professor of Skin and Venereal Diseases, Rush Medical College, &c., &c. Philadelphia : Henry C. Lea's Son & Co. 1883. Pp. 572.

In the Supreme Court of Appeals of Virginia. *Lewis & Als v. Whittle & Als*. In the matter of the Medical College of Virginia. Brief of Messrs. Joseph Christian, William Wirt Henry, and Guy & Gilliam. Wm. Ellis Jones, Book and Job Printer, Richmond, Va.

Suggestions Regarding the Local Treatment of some of the Commoner Affections of the Ear. By Samuel Theobald, M.D., of Baltimore. Surgeon to the Baltimore Eye, Ear, and Throat Charity Hospital; Ophthalmic and Aural Surgeon, to St. Vincent's Hospital, Baltimore. Read before the Clinical Society of Maryland. Nov. 17th, 1882. Reprint from Maryland Medical Journal of March 1st, 1883.

A Study of the Malformations, Variations and Anomalies of the Circulatory Apparatus in Man. With a Brief Consideration of Some of the Principles Governing their Production. By Randolph Winslow, M.D., of Baltimore, Md., Demonstrator of Anatomy in University of Maryland, and Professor of Surgery in the Woman's Medical College of Baltimore. Reprinted from the Annals of Anatomy and Surgery, November and December, 1882, and January, February and March, 1883. Brooklyn, N. Y.: Annals of Anatomy and Surgery. 1883.

NORTH CAROLINA MEDICAL JOURNAL.

THOMAS F. WOOD, M. D., Editor.

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ORIGINAL COMMUNICATIONS.

CARCINOMA OF THE STOMACH EXHIBITING NONE OF THE ORDINARY SYMPTOMS OF GASTRIC CANCER.

A Clinical Lecture delivered at the Hospital of the University of
Pennsylvania, November 11th, 1882.

By WILLIAM PEPPER, M.D., LL D.,

Professor of Clinical Medicine in the University of Pennsylvania.

Reported by WM. H. MORRISON, M.D., for the NORTH CARO-
LINA MEDICAL JOURNAL.

Gentlemen :—I shall devote the first portion of the hour to a consideration of the post mortem results of a case which had been in the hospital for eight months. Previous to his admission, he had been vomiting incessantly, but after being put to bed and given a liquid diet and suitable sedatives, the vomiting ceased and did not recur. At this time, there was felt in the abdomen, a tumor two and a half inches in length and one and a half inches in breadth, lying just to the left of the umbilicus and half an inch above it. This body very closely resembled the spleen in shape. It was freely

movable. He had no pain, no vomiting, no obstruction of the intestines, no diarrhœa, and felt so comfortable that he insisted that he was getting better ; but he was all the time losing flesh, growing paler and weaker, and three days ago, he died. The autopsy was made the same day.

On admission there was heard over the body of the heart, a murmur, which was transmitted somewhat into the aorta. There was slight disease of the mitral and aortic valves. This, however, had nothing to do with the abdominal trouble. There was no sign of aneurism of the abdominal aorta, or of any of its branches. These murmurs were due to an atheromatous condition of the aorta and slight disease of the mitral valve. There was also rigidity of the radial arteries and marked arcus senilis.

The first question was as to the nature of the tumor. When I first examined him, I regarded it as cancerous and never had any reason to change that opinion. The next question was as to the organ affected. In view of the history which he gave, of vomiting after anything was taken into the stomach, of constipation and of progressive emaciation. I at first, regarded it as cancer of the wall of the stomach or of the bowel. The man was, however, no sooner put to bed and given suitable food and drugs, than the vomiting ceased and never returned ; the bowels also, became almost regular and there was no sign of obstruction of the intestine. It was clear, therefore, that this mass was not located at the pylorus, causing mechanical obstruction to the passage of the food from the stomach. You are aware that among the most constant symptoms of cancer of the pylorus, are vomiting of partially digested food, coming on a certain time after eating and due to obstruction, and constipation of the bowels. If this mass did affect the pylorus, it produced no obstruction.

It might have occupied the greater curvature of the stomach. As the case was watched, the tumor became more and more movable until at last it could be moved so far in different directions that it was difficult to believe that it could be attached to the greater curvature of the stomach. Again, although in cancer in this situation, there is no obstruction of the pylorus, yet the presence of the cancerous ulceration is apt to cause vomiting.

Did it involve the wall of the intestine ? Cancers of the large

bowel are sometimes quite movable and can often be moved several inches in different directions, but rarely can they be moved to as great an extent as this mass could be. The total absence of any symptom of intestinal obstruction was opposed to the idea that the tumor was connected with the larger bowel.

Cancer of the pancreas it, of course, could not be, for that gives rise to an immovable tumor, very deeply situated. On pressing over the region of the stomach and pancreas, I found an indistinct sense of resistance, as though there were some thickening at a considerable depth, but I could not isolate any distinct mass. This resistance may have been due to the interposition of the tumor. When the mass was pushed away, the parts became so rigid that no information could be derived from palpation. There were no symptoms indicating that the pancreas was involved with the exception of the occurrence of fatty stools. I tried to test his capacity for absorbing fat by giving him measured quantities of olive oil and observing how much passed through the intestinal canal unabsorbed. The experiment was not satisfactory. I cannot give the precise amount of oil that he was capable of digesting, but he repeatedly passed stools showing undigested fat, either floating on the surface or covering the faeces.

With the exception of fatty stools, there were no symptoms which could be referred to cancer of the pancreas. He had not the least pain. In cancer of the pancreas, there is usually pain referred to the front, or more frequently to a corresponding point in the back. Owing to the close relation existing between the head of the pancreas and the pyloric extremity of the stomach, vomiting is frequently present. Jaundice is also quite common and is due to pressure on the common bile duct, by the enlarged organ. The wasting, in cancer of the pancreas, is as marked as in cancer of any other organ of the body. From a consideration of these points, I concluded that if the pancreas were involved at all, it was only to a slight extent.

The next point was, as to the possibility of this mass, being a displaced organ. It certainly was not the kidney. Might it be the spleen? Two questions presented themselves. Was it the shape of the spleen? Was the spleen in its normal position? It did feel very much like the spleen. It was hard, smooth, with a thick edge in

which there was a distinct notch, like the hilum of the spleen and it was about the size that a diseased spleen might be. Careful percussion showed that the spleen was not in its normal position. It was, therefore, not impossible that this mass was a displaced and diseased spleen.

Primary cancer of the spleen is excessively rare, and it seldom causes the death of the patient without secondary deposits appearing in other parts. I have, however, seen this occur. It usually leads to much greater enlargement than was here present before death occurs. As a rule, the disease in primary cases, is not infiltrated, but the cancerous masses grow from the surface of the organ giving rise to a nodulated tumor. In this case, the disease, if it involved the spleen, was evidently infiltrated, for the tumor was somewhat of the shape and size of the spleen, and was smooth. These points were against the idea that the spleen was the organ affected and by the time the case terminated, it was clear that this mass was not of that character.

Let us now turn to the specimens, which I have not yet examined. You will at once see that the diagnosis was not definitely made. It was one of the alternative conditions that I have mentioned.

In the first place as to the spleen. It was perfectly normal, of its proper size, shape and consistency, and without any secondary deposits, but it was not in its proper position and was not accessible to percussion. It was pushed back by the dilated stomach and was found against the spinal column overlapping the left kidney.

Here is a body which is curiously like the spleen in shape. It presents a distinct notch resembling the hilum of the spleen. The stomach is greatly dilated. There is no obstruction of the pylorus and yet below it, there is a mass of disease. The walls of the organ were so relaxed that this mass could be moved freely in every direction. This cancer is attached to the peritoneal surface of the stomach, and internally corresponding with it, there is a large ulcer of the lining membrane. The pyloric orifice is tunneled through a mass of cancerous matter and yet perfectly patulous. This cancer is continuous with a cancerous infiltration of part of the wall of the transverse colon. It is decidedly thickened; there is infiltration of the lining membrane and lessening of the calibre of the bowel, but there is no mass projecting into the bowel and no positive

obstruction. There is no perforation, no short-cut from the stomach to the colon.

I further find that the head of the pancreas was attached to this mass and was the seat of cancerous disease although not to any great extent. The glands in the neighborhood (the retro-peritoneal glands) are also involved. There was, therefore, reason enough for the sense of increased resistance in the epigastrium; but there is no distinct tumor capable of being isolated.

This, was then, a curious spleniform cancer growing from the peritoneal surface of the stomach, attached to the omentum and transverse colon, extending deep into the walls of the stomach, with a large cancerous ulceration of the mucous membrane, with infiltration of the walls of the stomach at the pylorus, but not involving it, with cancer of the pancreas and cancer of the surrounding glands. Could there be a more instructive instance of the difficulty of making a positive differential diagnosis in some cases of small movable abdominal tumors? You will see that, practically, it made no difference what organ was affected, as long as the cancerous nature of the disease was clearly recognized.

Let us examine the remaining organs. The supra-renal capsules are healthy. The liver is free from secondary deposits. The mucous membrane of the gall bladder is roughened. The kidneys are small and pale, and, I think, are the seat of fatty degeneration.

The heart is the seat of secondary cancerous deposits in the form of numerous, small, pale nodules beneath the endocardium and pericardium. The fact that they are not due to thickening of the serous membrane, but are actual deposits and the fact that they occur in widely disseminated cancerous disease, point to their cancerous nature.

There is marked atheroma of the coronary arteries and of the arch of the aorta, and slight thickening of the mitral valve. The murmurs were very slight and regarded them as being to a great extent due to the intense anæmia.

I think that you will all appreciate the great interest of this examination. It will be a most instructive case to turn back to when you meet with similar peculiar symptoms. The autopsy explains the absence of vomiting and obstruction of the bowel, the absence of dulness over the splenic region is also explained, but the extreme

mobility of the tumor which was one of the most difficult things to explain, is not satisfactorily accounted for, except by the enormous dilatation of the stomach and the relaxation of the parts during life. As the parts lie before me, I should very much doubt that this tumor could have been moved in the manner I have described, had I not seen and felt it myself.

You will often find in practice that the nearest you can come in your diagnosis, will be, in the first place, a positive diagnosis as to the nature of the disease, and, in the second place, an alternative diagnosis as to the precise position and relations of the tumor.

Let me again call attention to the extreme difficulty of deciding whether or not, in any case of disease, the pancreas is involved. This important organ, so largely connected with the processes of nutrition is unfortunately so placed that its diseases are with the greatest difficulty recognized.

The stomach is, in some cases, so tolerant to malignant disease that the symptoms on which we are accustomed to rely as indicating cancer of this organ, may all be absent, or most of them be absent while those which are present, for instance, tumor may exhibit such peculiarities as to be misleading, rather than of service.

MATTHEWS DUNCAN ON MINOR DISPLACEMENTS OF THE UTERUS.—In discussing the relative importance of descent, version, and flexion, he says: "It is, I believe, universally admitted that versions, flexions, and descent, are not necessarily the cause of any discomfort or disorder, and this is a cardinal fact in this question. Think of it. Thousands of blooming, happy, fertile women have displacements To treat a displacement, simply because it exists is a grave error, and yet not a rare one." * * * *

"There is another bad and too common practice which I must not omit to mention here; that is what is called straightening or putting up the womb, or replacing it time after time, by the probe or finger. This has no other effect than to irritate the organ, for the displacement recurs immediately after the probe or finger is removed, as the practice itself shows."

SELECTED PAPERS.

THE THEORY OR CAUSATION OF THE STERILITY OF WOMEN.

One of the Gulstonian Lectures

By J. MATTHEWS DUNCAN, M.D., LL.D., etc.,

Physician-Accoucheur and Lecturer on Midwifery at Bartholomew's Hospital.

ITS THEORY OR CAUSATION.

Mr. President, Vice-President and Gentlemen :—In studying the theory or inquiring into the causes of sterility in women, it is advantageous to keep in mind the corresponding condition in plants and in the lower animals, for in all living beings there is more or less similarity of the sexual organs and offices, and disturbance of function in one division will throw light on disturbance in another. On this subject I have made many, but only casual, observations and have had the privilege of conversation with gardeners and breeders, classes of men in whom are found many of remarkable intelligence and acuteness of observation. But the great storehouse of facts and references on which I rely on is Darwin's *Variation of Animals and Plants under Domestication*. Plants, and some animals, propagate otherwise than by sexual generation, but it is only the sterility arising from disturbance of the regular course and consequence of sexual union that has a direct or nearly direct bearing on the present inquiry. The sterility of hybrids, which, considering the theory he is supporting, forms naturally the main study of Darwin, is of comparatively little interest to us, and will not be hereafter referred to, but many of the principles of sterility find strong support in the special sterility of hybrids.

Viewing the subject generally, we may anticipate a great result by pointing out the paramount prevalence and paramount potency of constitutional conditions as causes of sterility. Such are cold and heat, overfeeding and underfeeding, youth and old age, degradation of general health, confinement and interbreeding.

Local conditions occur in plants that are quite sufficient to account

for or cause sterility. Such are contabescence of anthers, monstrous flowers, double flowers, seedless fruit. These local conditions are the result of the general or constitutional conditions of the individual in which they occur ; and they have their place rather in the results of sterility, or of the conditions producing sterility, than in the causes of sterility. They have their analogues in such abortions, dead fœtuses, unhealthy offspring, or monstrous products of animals, as are believed to be results of what may be called the sterile diathesis. The causes of sterility are causes of these imperfections, and for that reason they are referred to the sterile tendency. They do, indeed, constitute the sterility to be accounted for. Thus, to wander into hybridism for an example, it is an observation of Gärtner that hybridism in plants, a great cause of sterility, produces also a strong tendency in flowers to become double.

In the vegetable kingdom, everyone has observed that source of sterility which may be no doubt nearly truly, designated a degradation of general health. A plant covered with flowers is brought from a house where its fertility has been stimulated to the highest degree, and placed as an ornament in a sitting-room, where it remains until its charms are lost, and the result in such an injury to its constitutional vigor, that it is sterile, or nearly sterile, for one or for several subsequent seasons. Its fertility may never be restored, or only after several years of the medical care of a skillful gardener. The scarlet geraniums which are brought from their healthy homes, in full bloom to adorn the houses of inhabitants of densely populated cities soon show the injurious influence of their new surroundings, however well they may be cared for ; their flowers become less numerous, or are altogether wanting ; then their leafage diminishes greatly in quantity, and their existence becomes a mere lingering. A rose-garden, lately in a suburban position near London, becomes surrounded by the growing city, and gradually, as the buildings increase, the fertility of the roses diminishes ; the garden becomes useless. Some of our finest forest trees, and among them some plants, grow beautifully in our squares, producing wood in even exaggerated quantity, and a clothing of leaves sufficient for ornament ; but there is no wealth of leaves, and there is no seed. In some cases, an exception makes the rule more striking, as when a cherry-tree in the heart of the city of London lately produced

flowers and matured its fruit, so far as maturity is indicated by beauty, size, and taste.

Practical gardeners attribute sexual injury to overstimulation by manure, or what they call overfeeding. This ordinarily produces great growth of the tissues; and, when this is restrained by judicious pruning, it forces out a large or excessive crop of flowers and subsequent fruit. In the language of Spencer, there is produced by overfeeding an excess of individuation, the restraint of which results in excess of genesis. The natural tendency of the overfeeding of plants is to produce a degree of relative sterility; and this may show itself in a paucity of flowers, or it may show itself in the production of those double, or monstrous, or abortive flowers which are so much admired. The opposite result is produced by moderate or full feeding. Then, in mature plants, there is not great growth of tissues, but rather a production of fruit. Sometimes, the plant, without assignable cause, but especially if underfed, has an exaggerated production, and is said to run to seed; and from whatever it may arise, it, in a reflex manner, injures the plant, which consequently becomes blighted, and often dies. Excessive production here seems to take the place of sterility.

The following is an interesting illustration of the effect of overfeeding and of moderately feeding or underfeeding a vine; and it is important because it specifies a particular local condition or disease which is apparently the cause of the infecundity, of the overfed plants, and so indicates a line of investigation which may with advantage be pursued in other examples of sterility. In a recent letter from Mr. Thomson, the well-known vine cultivator, he writes: "A circumstance has arisen in my own experience that I have never seen noticed in print. A vine called the Alnwick seedling, if grown vigorously in rich soil, fails to set its fruit even when aided. This failure is caused by the exudation from the female organ of a dewdrop of sap, which moistens the pollen, and it does not descend through the pistil and impregnate the ova. When the vine is grown in poor soil the dewdrop does not appear, and impregnation takes place; seeds are formed in perfection, but the pulp for which the grape is grown is almost absent. I know," he adds, "no other grape affected in the same way or subject to the same influence."

I knew no good account of the sterility of plants as regulated by

age, but the influence of age is well recognized. A young fruit tree bears no fruit, or very little, and that little imperfect ; and the careful gardener does not permit it to bear much, or even a little, believing that fruit-bearing injures growth and diminishes future fertility. The influence of old age and decay in fruit-bearing trees is also well-known : the fruit is ill-developed, and there is little of it.

“ All know,” says Spencer, “ that a pear-tree continues to increase in size for years before it begins to bear, and that, producing but few pears at first, it is long before it fruits abundantly. A young mulberry branching out luxuriantly season after season, but covered with nothing but leaves, at length blossoms sparingly, and sets some small and imperfect berries, which it drops while they are green ; and it makes these futile attempts time after time before it succeeds in ripening and seeds. But these multiaxial plants, or aggregates of individuals, some of which continue to grow while others become arrested and transformed into seed-bearers, show as the relation less definitely than certain plants that are substantially, if not literally, uniaxial. Of these, the cocoa-nut may be instanced. For some years it goes on shooting up without making any sign of becoming fertile. About the sixth year it flowers and produces a few nuts, but these prove abortive, and drop. In the eighth year it ripens a moderate number of nuts, and afterwards increases the number, until, in the tenth year, it comes into full-bearing. Meanwhile, from the time of its first flowering, its growth begins to diminish, and goes on diminishing until the tenth year, when it ceases.”

The evil influence of interbreeding is a subject too extensive to enter upon at any length. In plants, it is corroborated by the well known advantage of crossing of varieties. But it needs no confirmation ; for there are self-important plants, plants more thoroughly fertilized by a nearly allied species than by pollen of their own species ; and there are the wonders of dimorphism with sterility arising from union of individuals not only of the same species, but of the same form. In the works of horticulturists is to be found ample evidence that interbreeding of plants tends to weakness, malformation, and sterility.

The influence of heat and cold is, in plants, well illustrated by

the failure of most Alpine species to produce flowers and fruit in lowland gardens, and by the same failure of lowland plants as they ascend the sides of mountains. A walk in the highlands will show the pines thriving on the hill-sides and well covered with cones ; but, as greater altitudes are reached, the trees are observed to become stunted, and the fruit entirely to fail.

The abortion-like sterility of plants is illustrated by the bearing of double flowers, of flowers whose seeds do not ripen, or whose seeds, though apparently perfect, are incapable of germination and growth. In some of the cases of seedless fruit, and of fruit with few seeds, or with one seed, or with imperfect seed, we have also abortion, and at the same time a fine illustration of the working, locally, of the opposition between individuation and genesis. The whole plant, as the vine or pear-tree, may have the appearance of health, and its fruit alone is unnatural. The tissues of the fruit-capsule are enormously developed, while the seeds have disappeared, or are reduced to one or a small number. The luscious pear or the juicy grape are masses of hypertrophy or myxomatous-like degeneration, while the seeds are the subject of extreme hypoplasia. Gardeners generally ascribe these results to overfeeding and overstimulation by manures and heat ; but Darwin is more cautious, and in most cases does not analyze the causes farther than is implied in "unnatural conditions of life." No one, according to Lindley, and Darwin, has produced double flowers by promoting the perfect health of the plant.

Before leaving vegetable physiology, I would point out the frequent occurrence in plants of seeds which, though apparently perfect, will not germinate ; they cannot be distinguished from their neighbors otherwise than by their incapacity for growing. The same failure to grow is often observed, under closely similar circumstances, in the eggs of fowls and other birds ; they cannot be hatched, although no imperfection is discoverable in them. That there are such ova in other animals and in woman is highly probable, but in them the completeness of the demonstration is unattainable.

Very little is known of the sterility of animals, and it is easily understood that reliable observations can only, with great difficulty, be made on them, especially in a state of nature. Many authors,

and latterly Darwin and his collaborators, have paid much attention to the great subject of the sterility of hybrid animals. Observations and experiments in this department are made chiefly on domestic animals, or on wild animals in confinement, and each experiment has a high value. But the sterility of ordinary domestic animals has been little studied. In herds of fine heifers and cows, and in mares, it is occasionally exhibited, but I have no data as to its frequency ; and in cattle, at least, observations are imperfect, the animal that, by sterility of one season, disappoints its owner, being generally at once fattened for the butcher.

It is a well known belief among breeders, which may be historically traced to ancient times, that when the female of any kind is made to breed when very young, she does so at the expense of permanently preventing her own growth to perfection, and she will be likely to produce offspring that is not of the best quality. This failure is well illustrated in the case of the common fowl and of the turkey, the progeny of chickens and of turkeys one year old being not the best of their kind, and specially difficult to rear. Fanciers breed these animals from a female two years and a male three years old. The occurrence of sterility in early and in elderly life is clearly seen, and its degree easily made out in pluriparous mammals, as the dog and pig, and in birds whose broods can be counted, and whose yearly production of eggs can also be numbered. This subject will be discussed fully when we come to consider pluriparity in woman.

Overfeeding, or the production of fatness or of obesity in the female, is well-known to be hostile to fertility, to be an illustration of the opposition of individuation to genesis. By special feeding and fattening turkeys and common fowls, the henwife arrests almost completely the production of eggs. They may also be made fewer by starving the birds, and not fewer only, but also smaller. These birds when highly fed, sometimes exhibit excessive productiveness, two eggs being laid daily, an instance of great intensity of fertility ; but this is not regarded with favor, having, I am told by a turkey-fancier, an injurious influence in their case, by delay of the commencement of laying in the season following that of the excessive production. The breeder of cattle prevents, by careful management, the fattening of the females.

In respect of feeding, comparisons are made between the relative sterility of wild animals and the comparative fertility of domesticated or confined animals of the same species, but the comparisons are not quite satisfactory, from the intermixture of the influences of food, and of domestication or confinement; and again, in the comparisons of animals fed on rich and on poor pasture, sufficient care is not taken to insure that the compared animals are of the same breed. With this previous reflection, I subjoin an interesting passage from Spencer's chapter on nutrition and genesis: "Clear proof," says he "that abundant nutriment raises the rate of multiplication and (*vice versa*) occurs among mammals. Compare the litters of the dog with the litters of the wolf and the fox. Whereas those of the one range in number from six to fourteen, the others contain respectively five or six, or occasionally seven, and four or five, or rarely six. Again, the wild cat has four or five kittens, but the tame cat has five or six kittens two or three times a year. So, too, is it with the weasel tribe. The stoat has five young ones once a year. The ferret has two litters yearly, each containing from six to nine, and this, notwithstanding that it is the larger of the two. Perhaps the most striking contrast is that between the wild and tame varieties of the pig. While the one produces, according to its age, from four to eight or ten young ones once a year, the other produces as many as seventeen in a litter; or, in other cases, will bring up five litters of ten each in two years, a rate of reproduction that is unparalleled in animals of as large a size. And let us not omit to note that this excessive fertility occurs where there is greatest inactivity—where there is plenty to eat and nothing to do. There is no less distinct evidence that, among domesticated mammals themselves, the well-fed individuals are more prolific than the ill-fed individuals. On the high and comparatively infertile Cotswolds, it is usual for ewes to have twins, but they very commonly have twins in the adjacent rich valley of the Severn. Similarly, among the barren hills of the west of Scotland, two lambs will be born by about one ewe in twenty; whereas, in England, something like one ewe in three will bear two lambs. Nay, in rich pastures, twins are more frequent than single births; and it occasionally happens that, after a genial autumn and consequent good grazing, a flock of ewes will next spring yield double their number of

lambs—the triplets balancing the uniparæ. So direct is the relation, that I have heard a farmer assert his ability to foretell, from the higher medium, or low condition of an ewe in the autumn, whether she will next spring bear two, or one, or none.”

An interesting department of the sterility of animals is that which results from confinement. This seems specially to affect what are vaguely designated the noble animals. Those which are sterile show great variations; some disdain to cohabit, or have lost sexual desire; others have increase of sexual appetite, and cohabit freely or excessively, but without impregnation resulting, or with the result very rarely following. Some, if impregnated, bring forth only abortions, or young which are born dead, or, if alive, feeble and ill-formed. There is, for instance, as Shorthouse has pointed out, a common occurrence of cleft palate in the lions' cubs born in the Zoological Gardens.

Among birds in confinement, there are many good examples of change of sexual habits and of sterility. In some cases, they have no eggs, or if they produce, they have only comparatively few or they may neglect the eggs when they produced, or the eggs duly cared for may be incapable of being hatched. This abortional sterility arising from imperfection of eggs as a result of confinement is well proved by experiments made in France on the common fowl. When these birds were allowed considerable freedom, 20 per cent. of the eggs failed to be hatched; when less freedom was allowed, 40 per cent. failed; when closely confined, 60 per cent. were not hatched.

The power of temperature that are not according to an animal's nature to induce sterility, is no doubt very great. Darwin mentions that Mr. Miller, a former Superintendent of the Zoological Gardens, believed that the sterility of the carnivora there was increased by increase of exposure to air and cold. In winter, inadequately sheltered cows either cease to give milk, or give it in diminished quantity. “And,” says Spencer, “though giving milk is not the same thing as bearing young one is built up, it is part of the outlay for reproductive purposes, and diminution of it is a loss of reproductive power.” Failure to maintain the cow's heat may entail such reduction in the supply of milk as to cause the death of the calf. Hard living, says Darwin, retards the period at which animals

conceive, for it has been found disadvantageous in the northern highlands of Scotland to allow cows to bear calves before they are four years old. Foulis found that, in the hot valleys of the equatorial Cordilleras, sheep were not fully fecund.

The common fowl will not breed in Greenland or Northern Siberia. "In this country, it is fed," says Spencer, "through the cold months; but nevertheless, in midwinter, it either wholly leaves off laying, or lays very sparingly. And then we have the further evidence that, if it lays sparingly, it does so only on condition that the heat, as well as the food is artificially maintained. Hens lays in cold weather only when they are kept warm. To which fact may be added the kindred one that, when pigeons receive artificial heat, they not only continue to hatch longer in autumn, but will recommence in spring sooner than they would otherwise do."

On the subject of the interbreeding of animals, there is a vast body of opinion as well as of facts showing its power in producing monstrosity and its ally, sterility. "If we were," says Darwin, "to pair brothers and sisters in the case of any pure animal, which from any cause had the least tendency to sterility, the breed would assuredly be lost in a few generations." Elsewhere, he shows that "long-continued close interbreeding between the nearest relations diminishes the constitutional vigor, size, and fertility of the offspring; and occasionally leads to malformations, but not necessarily to general deterioration of form or structure. The failure of fertility shows that the evil results of interbreeding are independent of the augmentation of morbid tendencies common to both parents, though this augmentation no doubt is often highly injurious. Our belief that evil follows from close interbreeding rests to a large extent on the experience of practical breeders, especially of those who have seen many animals of the kind which can be propagated quickly; but it likewise rests on several carefully recorded experiments. With some animals, close interbreeding may be carried on for a long period with impunity, by the selection of the most vigorous and healthy individuals; but sooner or later, evil follows. The evil, however, comes on so slowly and gradually, that it easily escapes observation, but it can be recognized by the almost instantaneous manner in which size, constitutional vigor, and fertility are regained when animals that have long been interbred are crossed with a distinct family."

Regarding the very remarkable subject of sterility of sexual connection with special individuals only, Darwin says: "It is by no means rare to find certain males and females which will not breed together, though both are known to be perfectly fertile with other males and females. We have no reason to suppose that this is caused by these animals having been subjected to any change in their habits of life. * * * The cause apparently lies in an innate sexual incompatibility of the pair which are matched. Several instances have been communicated to me by Mr. W. C. Spooner (well-known for his essay on Cross-breeding), by Mr. Eyton, of Eyton, by Mr. Wicksted, and other breeders, and especially by Mr. Waring, of Chelsfield, in relation to horses, cattle, pigs, foxhounds, other dogs, and pigeons. In these cases, females which either previously or subsequently were proved to be fertile, failed to breed with certain males, with whom it was particularly desired to match them. A change in the constitution of the female may sometimes have occurred before she was put to the second male; but in other cases the explanation is hardly tenable, for a female known not to be barren has been unsuccessfully paired seven or eight times with the same male, likewise known to be perfectly fertile. With cart-mares, which sometimes will not breed with stallions of pure blood, but subsequently have bred with cart-stallions, Mr. Spooner is inclined to attribute the failure to the lesser sexual power of the race horse; but I have heard from the greatest breeder of the race horses at the present day, through Mr. Waring, that it frequently occurs with the mare to be put several times during one or two seasons to a particular stallion of acknowledged power, and yet prove barren, the mare afterwards breeding at once with some other horse. These facts are worth recording, as they show, like so many previous facts, on what slight constitutional differences the fertility of an animal often depends."

Before leaving the subject of the causes of sterility of animals, I quote a passage from Darwin regarding the results of confinement: "Sufficient evidence," says he, "has now been advanced to prove that animals, when first confined, are eminently liable to suffer in their reproductive systems. We feel at first naturally inclined to attribute the result to loss of health, or at least to loss of vigor; but this view can hardly be admitted, when we reflect how healthy,

long-lived, and vigorous many animals are under captivity, such as parrots, and hawks when used for hawking, cheetahs when used for hunting, and elephants. The reproductive organs themselves are not diseased, and the diseases from which animals in menageries usually perish are not those which in any way affect their fertility. No domestic animal is more subject to disease than the sheep, yet it is remarkably prolific. The failure of animals to breed under confinement has been sometimes attributed exclusively to a failure in their sexual instincts. This may occasionally come into play; but there is no obvious reason why this instinct should be specially liable to be affected with perfectly tamed animals, except, indeed, indirectly, through the reproductive system itself being disturbed. Moreover, numerous cases have been given of various animals which couple freely under confinement, but never conceive, or, if they conceive and produce young, these are fewer in number than is natural to the species. In the vegetable kingdom, instinct, of course, can play no part; and we shall presently see (he says) that plants, when removed from their natural conditions, are affected in nearly the same manner as animals. Change of climate cannot be the cause of the loss of fertility; for whilst many animals imported into Europe from extremely different climates breed freely, many others when confined to their native land, are completely sterile. Change of food cannot be the chief cause, for ostriches, ducks, and many other animals, which must have undergone a great change in this respect, breed freely. Carnivorous birds, when confined are extremely sterile; whilst most carnivorous mammals, except plantigrades, are moderately fertile. Nor can the amount of food be the cause; for a sufficient supply will certainly be given to valuable animals; and there is no reason to suppose that much more food would be given to them than to our choice domestic productions, which retain their full fertility. Lastly, we may infer, from the case of the elephant, cheetah, various hawks, and of many animals which are allowed to lead an almost free life in their native land, that want of exercise is not the sole cause. It would appear that any change in the habits of life, whatever these habits may be, if great enough, tends to affect in an inexplicable manner the powers of reproduction. The result depends more on the constitution of the species than on the nature of the change; for certain whole

groups are affected more than others ; but exceptions always occur, for some species in the most fertile groups refuse to breed, and some in the most sterile groups breed freely. Those animals which usually breed freely under confinement, rarely breed, as I was assured, in the Zoölogical Gardens, within a year or two of their first importation. When an animal which is generally sterile under confinement happens to breed, the young, apparently, do not inherit this power ; for, had this been the case, various quadrupeds and birds which are valuable for exhibition would have become common. Dr. Broca even affirms that many animals in the Jardin des Plantes, after having produced young for three or four successive generations, become sterile ; but this may be the result of too close interbreeding. It is a remarkable circumstance, that many mammals and birds have produced hybrids under confinement quite as readily as, or even more readily than, they have procreated their own kind. Of this fact, many instances have been given ; and we are thus reminded of those plants which, when cultivated, refuse to be fertilized by their own pollen, but can easily be fertilized by that of a distinct species. Finally, we must conclude, limited, as the conclusion is, that changed conditions of life have an especial power of acting injuriously on the reproductive system. The whole case is quite peculiar ; for those organs, though not diseased, are thus rendered incapable of performing their proper functions, or perform them imperfectly.”—*British Medical Journal*.

LIABILITY TO ENTERIC FEVER AT DIFFERENT AGES.

Dr. D. M. Fraser, has calculated (1) the liability to enteric fever at different ages, by comparing the total number of cases admitted to the three great fever hospitals of London for ten years—1871–80; (2) the number of persons living at different ages per cent. of the total living at all ages in London. He shows that after the age of 20, liability to attack from the disease diminishes ; that is to say that after the age of 20, there are comparatively few susceptible to the disease.—*Br. Med. Jour.*

SKETCH OF THE DOCTOR OF 1784.

The following sketch is taken from McMaster's *History of the People of the United States*. The book abounds in picturesque descriptions of the professions, trades and politics of the period just after the Revolutionary War, and will, doubtless, at once take its place in our literature, just as Green's "Short History of the English people" did :

"Not less important than the school master, in the opinion of his townsmen, was the doctor. With the exception of the minister and the judge, he was the most important personage in the district. His professional education would now be thought insufficient to admit him to practice ; for there were then but two medical schools in the country, nor were they, by reason of the expense and the dangers of travelling, by any means well attended. In general, the medical education of a doctor was such as he could pick up while serving an apprenticeship to some noted practitioner in Boston or New York, during which he combined the duties of a student with many of the menial offices of a servant. He ground the powders, mixed the pills, rode with the doctor on his rounds, held the basin when the patient was bled, helped to adjust plasters, to sew wounds, and ran with vials of medicine from one end of the town to the other. In the moments snatched from duties such as these, he swept out the office, cleaned the bottles and jars, wired the skeleton, tended the night-bell, and, when a feast was given, stood in the hall to announce the guests.

"It was a white day with such a young man when he enjoyed the rare good fortune of dissecting a half-putrid arm, or examining a human heart or lungs. So great, indeed, was the difficulty of procuring anatomical subjects, that even at the medical school which had just been started at Harvard College, a single body was made to do duty for a whole year's course of lectures. It was only in filching from grave yards or begging the dead bodies of criminals from the Governor that subjects could be obtained.

"Under such circumstances, the doctor's knowledge was derived from personal experience rather than from books, and the amount so obtained bore a direct relation to the sharpness of his powers of observation and the strength of his memory. If he were gifted

with a keen observation, a logical mind, and a retentive memory, such a system of education was of the utmost value. * * * The advantages of such a system of study were, however, but sparingly enjoyed by the medical students of the last century when but few physicians boasted a medical library of fifty volumes.*

“ His apprenticeship ended, the half-educated lad returned to his native town to assume the practice and to follow in the footsteps of his father. Then, as years went by he grew in popularity and wealth. His genial face, his engaging manners, his hearty laugh, the twinkle with which he enquired of the blacksmith when the next boy was expected, the sincerity with which he asked after the health of the carpenter’s daughter, the interest he took in the family of the poorest laborer, the good nature with which he stopped to chat with the farm-hands about the prospect of the corn-crop and the turnip crop, made him the favorite of the country for miles around. When he rode out he knew the names and personal history of the occupants of every house he passed. The farmer’s lads pulled off the hats, and the girls dropped courtesies to him. Sunshine and rain, daylight and darkness, were alike to him. He would ride ten miles on the darkest night, over the worst of roads, in a pelting storm, to administer a dose of calomel to an old woman, or to attend a child in a fit. He was present at every birth ; he attended every burial ; he sat with the minister at every death-bed, and put his name with the lawyer to every will.

“ But a few of the simplest drugs were then to be found stowed away on the shelves of the village store, among heaps of shoes, Rohan hats, balls of twine, packages of seed, and fitches of bacon. The physician was, therefore compelled to combine the duties both of the doctor and the apothecary. He pounded his own drugs, made his own tinctures, prepared his own infusions, and put up his own prescriptions. His saddle-bag was the only drug store within forty miles, and there, besides his own balances and his china mortar, were medicines now gone quite out of fashion, or at most but rarely used. Homœopathy, with its tasteless mixtures and diminutive doses was unknown, and it is not too much to say that more

*Dr. Hubbard, first President of the New Haven County Medical Society, organized in 1784, was, perhaps, the most wealthy practitioner in the county. Yet, when he died, his books were valued at \$82.

medicine was taken every year by the well than is now taken in the same space by the sick. Each spring the blood must be purified, the bowels must be purged, the kidneys must be excited, the bile must be moved, and large doses of senna and manna, and loathsome concoctions of rhubarb and molasses were taken daily. In a thousand ways the practice of medicine has changed since that day and has changed for the better. Remedies now in the medicine-box of every farmer were then utterly unknown. Water was denied the patient tormented with fever, and in its stead he was given small quantities of clam-juice. Mercurial compounds were taken till the lips turned blue and the gums fell away from the teeth. The damsel who fainted was bled profusely. Cupping and leeching were freely prescribed. The alkaloid quinia was unknown, till 1820. The only cure for malarial diseases was powdered cinchona bark; but the amount required to restore the patient was so great, and the supply so small, that the remedy was all but useless. Vaccination was not made known by Jenner until 1798. Inoculation was still held by many to be attended by divine punishment. Small pox was almost as prevalent as pneumonia now is. The discovery of anesthesia by the inhalation of ether or chloroform was not given to the world by Morton till 1846. Not one of the many remedies which assuage pain, which destroy disease, which hold in check the most loathsome maladies and the most violent epidemics, was in use. Every few years during the dog-days the yellow-fever raged with more violence in the northern cities than it has ever done in this generation in the cities of the far South. Whole streets were depopulated. Every night the dead cart shot its scores of corpses into the pits of the Potter's Field. Better surgery is now generously given to every laborer injured by the fall of a scaffold than could then have been purchased at any price." Pp. 29-31.

The Medical Society of North Carolina meets on the 15th May next. Those of our friends who will not be present, will please send their subscription by a friend. All new and old subscription.

RENAL INADEQUACY.

In an address on this subject recently delivered before the Metropolitan Counties Branch of the British Medical Association, Dr. Andrew Clark, Physician and Lecturer on Clinical Medicine, London Hospital, and President of the Clinical Society, stated "There is a certain state of the kidney in which, without any alteration of structure that the eye can detect, it can, nevertheless, not produce a perfectly healthy urine. It is an urine low in density and deficient in solid constituent, principally in urea and its congeners. I call this state renal inadequacy. You may say, 'It seems scarcely wise to introduce a name like that, when probably it is nothing less than an early stage of Bright's disease. Why bring in another name.' I will not say that it is not an early stage of Bright's disease; I do not know. I think it need not necessarily be; but I shall assume that it is, perhaps, a very early stage of Bright's disease. I nevertheless think it of practical value—and we who are here to-night are practical men—to recognize by a distinct name a state which may remain as it is during the whole period of life, which is nevertheless capable of removal, and which, if unnoticed, may lead to serious injury to the patient. Let me explain. The people who have this renal inadequacy are characterized by three things particularly. First and foremost, they are characterized by a curious inability properly to repair damages done to them either by accident or by disease. I have no doubt you as well as I have often been puzzled to know why, in particular cases, they could not repair a common accident; or why, in a disease, such as pneumonia, the exuded stuff was not melted and speedily swept away; why a man who had met with some trifling accident in the wrist or shoulder remained suffering from it. Then, they not only repair damages of this kind slowly, but they are peculiarly vulnerable. They are a people, as a rule, who are always catching cold, and who, when they catch cold, come within the category of the first characteristic—namely, that they do not get rid of the cold. They are the people who, without apparent reason, and without other existing disease, get pneumonias, pleurisies, pericarditis, and the like. Then, thirdly—and, I think, almost the most important thing to be noticed about these cases—you can never be sure of the result of

the performance of an ordinary surgical operation upon them. It is this class of people, as I had the opportunity a few years ago, in London, of discovering, that die from a simple operation by hemorrhage. It is this class of people who have an abscess opened and immediately become what is called pyæmic. It is this class of people who, without his being able to explain it, attracted the notice of that distinguished surgeon Sir James Paget. Some years ago he said, 'Whenever I find a man in ill-health, without definite cause for the ill-health, I feel sure that my chances of success in operating upon him are diminished by at least one-half.'—*British Medical Journal*.

A NOVEL AGENT IN THE RADICAL CURE OF HYDRO- CELE.

J. E. W. Walker, M.R.C.S.E., L.S.A., late H.M., 55th Regiment, writes: "In bringing this matter before the profession, I feel bound to admit that, but for a curious accidental circumstance, the agent might never have presented itself to my notice. In the year 1875, I proposed to operate upon a patient, aged 65, for the radical cure of hydrocele of the tunica vaginalis. The disease had existed for about ten years, and had been repeatedly emptied by other surgeons. At this time I removed, by the trocar and canula, about twelve ounces of serum, and, by accident, took from my pocket a bottle containing about two drachms of liquor ergotæ (Battey) in the place of the same quantity of tincture of iodine, which it was my intention to throw into the cavity. On my return home, I discovered the mistake, and watched the patient for some hours at intervals. No inflammatory state occurred, and there was entire absence of pain, so that I allowed my patient to return to his ordinary occupation the next morning. To the present time there has been no return of the abnormal secretion. I have since, on two occasions, used the same plan with perfect success, and I attribute the cure to a specific action, exerted by ergot which reëstablishes the balance between secretion and absorption."—*British Medical Journal*.

CORRESPONDENCE—A CORRECTION.

The reporter made me say, in the Transactions of the last meeting of the North Carolina Medical Society, that patients affected with rheumatism are exempt from typhoid fever. I intended to say, that patients of rheumatic diathesis seem to be in a great manner exempt from malarial fever.

I think that a better understanding of atmospheric conditions, and a fuller knowledge of the bacteria will explain many of the uncertainties of diseases, their origin, and progress. Bacteria, and particles of matter may be carried to parts far removed from the starting point, borne from zone to zone, on the various currents of wind either in mid-heaven, or on a level with the earth. Some of these winds, or the burdens they carry, are as destructive to some diseases, as others are favorable to their development. This may account for the seeming antagonism of some diseases. My note book shows that during the prevalence of southern winds, we have stomach and bowel troubles, while, with winds from the north, the lungs and throat suffer. The temperature will not account for these two different conditions.

The Harmattan, a special wind that blows, hot and dry, from the interior of Africa, three or four times a year, towards the Atlantic, has a very wonderful effect in a sanitary point of view. The malarial fevers so prevalent in that country, and all infectious diseases disappear as if by magic, when these winds blow. Then, there are other ones that blow over southern Europe, the Sirocco of Italy, and the Solera of Spain, dry and hot, like the Harmattan and producing similar physical effects, but utterly unlike it in its sanitary influence. It enervates and seems to favor the development of disease while it prevails.

J. W. JONES, M.D.

Wake Forest, N. C., April 7th, 1883.


DIALYZED IRON.—We are surprised to see that this preparation, once so neglected, is again attracting the attention it deserves. It contains 98.5 of oxide of iron, and 1.5 of hydrochloric acid, according to a recent analysis by Professor Tichborne.

EDITORIAL.

NORTH CAROLINA MEDICAL JOURNAL

A MONTHLY JOURNAL OF MEDICINE AND SURGERY, PUBLISHED
IN WILMINGTON, N. C.

THOMAS F. WOOD, M. D., Wilmington, N. C., Editor.

 *Original communications are solicited from all parts of the country, and especially from the medical profession of THE CAROLINAS. Articles requiring illustrations can be promptly supplied by previous arrangement with the Editor. Any subscriber can have a specimen number sent free of cost to a friend whose attention he desires to call to the JOURNAL, by sending the address to this office. Prompt remittances from subscribers are absolutely necessary to enable us to maintain our work with vigor and acceptability. All remittances must be made payable to THOMAS F. WOOD, M. D., P. O. Drawer 791, Wilmington, N. C.*

THE NORTH CAROLINA ACCIDENT.

I.

The approaching meeting of the State Society, recalls the history of a very serious mistake made, by inoculating many persons with small-pox matter, the operator supposing that he was using vaccine.

This blunder had such far-reaching consequences, that it may be well to sketch the narrative, as probably no record of it still remains in North Carolina, except in the exceedingly rare copies of the "*Vaccine Inquirer*," issued in 1823, and in the old files of the *Raleigh Register*, now equally difficult to procure.

In 1815 Congress passed a law creating a Vaccine Bureau and placing it in the charge of Dr. James Smith, of Baltimore. Dr. Smith was, at the date of his appointment, an experienced vaccinator. He had been, with one exception, the first vaccinator in Baltimore, his first work dating as early as 1801.

He had been far in advance of the profession of the whole country in establishing a vaccine "institution" for the propagation and

distribution of virus.* His appointment was a very proper one, and being at a point so near the capital of the young republic, and so near the centre of the population as then distributed, gave him the means to communicate with the Atlantic sea border, the part of the country then, by reason of its water communication easiest of access, and containing then the bulk of the inhabitants.

Dr. Smith had agencies in several parts of the country. For North Carolina he had appointed Dr. John R. Ward, of Tarborough, a physician of high standing, and whose practice was very extensive.

Whether Dr. Ward received only one supply of virus from Dr. Smith is not apparent ; but on one occasion he received a package marked [Variol. ———], containing a crust of what he supposed to be vaccine. Dr. Smith's high standing as a vaccine propagator, left no room for doubt on the part of Dr. Ward, that he had received the genuine vaccine. With confidence he vaccinated from this stock, and the result was a crop of genuine small-pox.

To show the seriousness of such a disaster we turn to the speech in Congress, of Mr. Burton, of North Carolina : “ No man at this day doubted the efficacy of vaccination. He only objected that this vaccine institution had not been correctly managed. This agent (Dr. Smith) had sent small-pox matter into the interior of the country, where in all probability it would not have found its way for forty years, but for this agency. The British Army, when it passed through that region forty years ago, last communicat'ed the small-pox.

It was well-known, that while South Carolina has suffered by serious attacks of small-pox, at periods prior to 1822, Virginia and North Carolina had been almost entirely exempt, so rigid were the restrictions employed by these two States.

It was not long before Dr. Ward discovered the mistakes, and he promptly informed Dr. Smith of them, by letter. But the means of communication were very slow in those days, and, in the interval of time it took letters to pass the small-pox was spreading.

The whole community was filled with consternation and indigna-

*We are indebted to Dr. John R. Quinan, of Baltimore, for valuable items touching the early work of Dr. Smith, and the biography of the Baltimore doctors of the early years of this century.

tion. Dr. Ward did not conceal from his patients that he had unfortunately communicated small-pox to them, and candidly explained the whole transaction. Meantime, Dr. Ward's opponents had made use of the disaster to his detriment, and acrimonious re- crimination sprung up. Letters were sent in every direction where virus was likely to be found, Halifax and Fayetteville, being particularly mentioned. But the slow stage or private conveyance over bad roads was the only means of communication. At last vaccine was obtained from Halifax. Dr. Ward in meantime had abandoned all of his other practice, and devoted himself exclusively to those patients, who had unfortunately received small-pox at his hands.

When the news reached Dr. Smith in Baltimore he at first denied any error on his part, but subsequently discovered that the package marked [variol.] had gone out to his agent, and that it was indeed, a small-pox crust he had sent.

It does much credit to the good sense of the people at Baltimore and North Carolina, that this accident—this gross carelessness in fact—had not discredited the protective power of vaccination.

The modified small-pox so familiar to us now as varioloid, was then only indefinitely separated in the minds of some practitioners, from chicken-pox, and it was this disease which Dr. Smith at first thought had made its appearance in Tarborough.

The discussion which ensued, was very spirited, and resulted in the dismissal of Dr. Smith from the agency, by the President of the United States.

DIAGNOSIS AND TREATMENT OF LUPUS VULGARIS.—Boeck (*Tidsskrift for prakt. Med.*, Nos. 19, 20 and 21; abstract in *Viertelj für Derm., und Syph.*, Heft 3, 1882) recommends a pyrogallic plaister for the treatment of lupus. His formula is:—Ole; olivæ, resinæ colophonix, aa 8 grammes; ceræ flavæ, 15 grammes; gummi resinæ ammoniaci, balsami terebinthinæ venetæ, aa 1 gramme; acidi pyrogallici, 4 grammes. Fiat plastrum.—*London Medical Record*.

REVIEWS AND BOOK NOTICES.

THE DISPENSATORY OF THE UNITED STATES OF AMERICA. By GEO. B. WOOD and DR. FRANKLIN BACHE. Fifteenth Edition. By H. C. Wood, M.D., etc., Joseph P. Remington, Ph. G., and Samuel Sadtler, Ph. D., F.C.S. Philadelphia: J. B. Lippincott & Co. 1883. Pp. 1930.

I.

For some months we have been awaiting the pleasure of seeing the Dispensatory in its new form. More than usual interest has been awakened in this edition, not only on account of its exposition of and commentary on the Pharmacopœia of the United States of 1880, but to examine the recast of the therapeutics under the master hand of the new editor-in-chief. To make a comprehensive review of a book of nearly 2,000 pages in the small space at our command, would be impossible, we will, therefore, only attempt in this notice to point out the changes which have taken place.

For the first time in the history of the work, it has been possible to carry out the original design of Dr. George B. Wood, its founder, in having an editor to each branch of the subject-matter. The arrangement of the Dispensatory has been altered so as to run parallel with that of the new Pharmacopœia of the United States, the first and second parts being collated and formed into Part I, in alphabetical arrangement, and all "Drugs and Medicines not Official" placed in part II. This part is printed in smaller type so as to compress all that is valuable in one volume.

All that has been promised in early announcements has been fully carried out, and now the Dispensatory stands the unrivalled exponent of Materia Medica, Pharmacy, Therapeutics and Toxicology in the English language.

Our attention is first called to a useful innovation, that of indicating the correct Latin pronunciation of articles. Such information is not so entirely useless as some good scholars would suppose.

The new class of preparations introduced into the Pharmacopœia, under the name of ABSTRACTS is noticed with favor, as it deserves to be. It will occur in the experience of the busy doctor quite frequently, that it would be desirable to give hyosciamus or aconite to children, in the form of a powder. Powdered extracts, especially

in our warm climate, are so liable to solidify, that they are practically useless. Abstracts keep well, according to the present experience. They are in every case twice as strong as the crude drug or fluid extract, and about ten times the strength of the tincture. So far only eleven abstracts have been recognized, and their increase will depend upon the amount of favor with which they are received.

We notice one change in spelling of the well-known word *ASAÆTIDA*, instead of the old form *Assafoetida*, when the crude drug is described; but under the head of *enēm'a,ta*, *enema asafœtidæ* is spelt with the double s. In the index both modes of spelling are used.

The increase in size is very great as compared with the twelfth edition, the one now at hand. The length of the page has been increased one half inch, and 300 pages added to the number. The mechanical execution is in every way superior to former editions.

We propose to say more at some other time about this volume, but for the present only welcome it to our table as an old and highly honored friend raised to a new distinction.

THE PATHOLOGY AND TREATMENT OF DISEASES OF THE OVARIES. By LAWSON TAIT, F.R.C.S. Fourth Edition. Rewritten and Greatly Enlarged. New York: William Wood & Co., 56 and 58 LaFayette Place. 1883. Pp. 357.

This volume is an elaboration of previous editions of Mr. Tait's Hasting's Essay for 1873. We are introduced pleasantly into the physiology and anatomy of the ovary, and from this to the last chapter our interest is unabated.

The author has had large experience, is full of enthusiasm, and such enthusiasm as no author can bring to his work, but one who has had brilliant successes.

The volume concludes with a series of 101 consecutive operations for the removal of ovarian and parovarian tumors, performed without any of the Listerian details, forming his most recent experience.

The review of the recent extensions of abdominal and pelvic surgery, comprises very remarkable adventures in this new department of surgery, which would have been considered, twenty years ago, too remarkable for credence. Mr. Erichsen prophesied ten

years ago that operative surgery had reached the utmost limit of its possibilities. But when we come to add the numerous operations that are now performed upon abdominal and pelvic organs, the aggregate is so great as almost overshadow all that was known a few years ago.

If specialists can succeed in imparting their knowledge, so as to make the necessary surgical procedures plain enough to be undertaken by general practitioners, with reasonable prospect of fair success, then would be inaugurated a inestimable achievement. This is entirely too much to hope for, but an immense impetus has certainly been given by such works as Mr. Tait's.

The volume is beautifully printed, and is attractive in every respect.

HEADACHES: THEIR NATURE, CAUSES, AND TREATMENT. By WILLIAM HENRY DAY, M.D., Member of the Royal College of Surgeons, London, etc. Fourth Edition with Illustrations. P. Blakiston, Son & Co., 1012 Walnut Street, Philadelphia. Price: cloth, \$1.25 ; paper, 75 cents.

This work forms a new volume of Messrs. Blakiston's Octavo Series of Standard Medical Books.

We have had occasion previously to speak of this work in terms of commendation. Further acquaintance with it has proven it to be more valuable than we at first thought.

At first sight a volume on headache, a mere concomitant of other diseases as it is esteemed by some, would seem to be an unnecessary piece of book-making. But there is not a practitioner of extended practice who has not desired to consult a treatise devoted to the subject of headache.

His chapter on "Headaches of Childhood and Early Life," especially, are well conceived and abound in admonition and common sense. The author adopts the following classification :

1. Cerebral headache, attributable to injury or to acute or chronic inflammation.
2. Gastric headache, from intestinal and hepatic derangement, known as bilious headache (*sympathetic headache*).
3. Epileptic headache (*congestive headache*.)
4. Febrile headache (active hyperæmia or active congestion).

5. Headache from anæmia, neuralgia, etc., constituting *nervous headache*.

6. Headache depending on some intricate change in the cerebral membranes or tissue of the brain.

7. Organic headache.

THE DISEASES OF WOMEN. A MANUAL FOR PHYSICIANS AND STUDENTS. By HEINRICH FRITSCH, M.D. Professor of Gynecology and Obstetrics at the University of Halle. Translated by Isidor Furst. With 159 Wood Engravings. New York. William Wood & Co., 56 and 58 La Fayette Place. 1883. Pp. 355.

This is the March number of Wood's Library now so well known. This library now abounds in books on the diseases of women, the chief advantage to the reader being, that he can inform himself what a great stride European gynecologists are making, under the leadership of American and English authors. We do not mean to do injustice to our German friends when we say it, but it is nevertheless true, that after consulting their works for help in time of need, we return to the practical works of our American gynecologists with renewed pleasure.

INFORMATION AND STATISTICS OF WILMINGTON, NORTH CAROLINA.

This is a handsome volume of 252 pages printed for private distribution, being a report of Mr. James Sprunt, retiring President of the Produce Exchange, and presented gratuitously to that body.

This is one of the rare cases of the busy merchant turned author. In the spare time snatched from his well-occupied hours, Mr. Sprunt has brought together material, with which to illustrate the commercial, industrial, and educational resources of his adopted home.

An examination of the volume shows that much of the information was gathered from difficult sources. Even the antiquated tomes of Lawson, Brickell and Michaux were made to contribute to the natural history and historical sketch.

We are glad to see one chronic error corrected, which has been repeated in sketch after sketch of Wilmington. Spence Compton has been called the Earl of Wilmington, whereas there never was such an Earl; his title being that of a Baron.

Mr. Sprunt has given us in this little volume, a record of great value, which must be the standard for many years to come, in all matters commercial and educational, appertaining to Wilmington. We regret that the edition is so small that only a few numbers of the work will reach points beyond Wilmington, and we trust that the corporation will order a sufficient number prepared for wide distribution. The present demand already warrants the expense.

CONVALLARIA.—Dr. Bianchi (*Gazz. degli Ospitali*, Jan., 1883) gives a tolerably full account of present and former views regarding this drug. Upwards of a hundred years ago preparations of *convallaria majalis*, or lily of the valley, were in use for a variety of ailments; and now, after long neglect, they are again coming into favor, especially in France and in Russia. Its physiological actions and therapeutical uses are almost identical with that of *digitalis*. Sometimes, however, it is found to answer where *digitalis* has failed. It is used in diseases of the heart, nervous and organic. It is said also to deepen respiration, and to render it easier. It is therefore valuable in asthma, whether cardiac or emphysematous; for this purpose, iodide of potassium increases its efficacy. It has a well-marked diuretic action. It has no unpleasant effect either on the digestive or on the nervous system. Owing to the resin the drug contains, the urine becomes turbid with nitric acid. If the urine be first agitated with ether, the acid does not affect it.—*London Medical Record*.

LIABILITY TO ENTERIC FEVER AT DIFFERENT AGES.—Dr. D. M. Fraser, has calculated (1) the liability to enteric fever at different ages, by comparing the total number of cases admitted to the three great fever hospitals of London for 10 years—1871–80; (2) the number of persons living at different ages per cent. of the total living of all ages in London. He shows that after the age of 20, liability to attack from the disease diminishes; that is to say that after the age of 20 there are comparatively few susceptible to the disease.—*British Medical Journal*.

CURRENT LITERATURE.

PICRIC ACID AS A TEST FOR ALBUMEN AND SUGAR IN THE URINE.

For the detection of albumen, Dr. George Johnson, M.D., F.R.S., recommends that this acid should "be used in the form of a saturated aqueous solution, or in the form of powder or crystals. The aqueous solution is most suitable for home use, while the powder or crystals may conveniently be carried in a urinary pocket test-case. A saturated aqueous solution may be quickly made by adding about fifty times the bulk of boiling distilled or rain water to the powder or crystals, a portion of the acid will crystallize out on cooling, leaving a transparent yellow supernatant liquid. This solution being added to an equal volume of albuminous urine in a test-tube, immediately coagulates the albumen. The coagulated picrate of albumen is soluble in alkalis; if, therefore, the urine be highly alkaline, it must be acidulated by a vegetable or a mineral acid before adding the picric acid, I have not found it once necessary to acidulate the urine. The picric acid solution is itself sufficiently acid to dissolve the phosphatic sediment which results from boiling a neutral or alkaline specimen of urine. To detect a very minute quantity of albumen, the following method is the best. Into a test-tube about six inches long, the urine is poured to within two inches of the top: then, the tube being held in a slanting position, about an inch of the picric acid solution is gently poured on the surface of the urine, where in consequence of its low specific gravity (1003), it only partly mixes with the upper layer of the urine; and, as far as the yellow color of the picric solution extends, there will be more or less turbidity from coagulated albumen will gradually subside, and form a delicate horizontal film at the junction of the colored and the unstained stratum of urine, the yellow liquid above and the uncolored urine below being quite free from turbidity. If the urine should be turbid with urates, it must be cleared by heat before the addition of the picric acid solution.

"As a result of numerous observation, I have arrived at the conclusion that picric acid applied in this way is a more delicate,

and, therefore most trustworthy, test for albumen than nitric acid in cold urine, whether the latter be employed by the method of dropping the acid into the cold urine, or by pouring the urine on the acid previously placed in the tube. The simplest and most satisfactory mode of comparing the two tests as regards their relative delicacy, is to dilute a specimen of albuminous urine until one or the other test fails to act ; and it will be found that the picric acid solution shows the presence of albumen in a specimen diluted considerably beyond the point at which the nitric acid fails to give any indication. The picric acid too often causes an immediate albuminous opalescence in specimens in which nitric acid only slowly, and after an interval of some minutes, gives a similar, but sometimes a doubtful indication." Dr. Johnson also describes a new process by which picric acid can be employed for detecting the presence of glucose in the urine.—*British Medical Journal*.

AMATEUR THERAPEUTICS.

Few men are willing to admit that there is any department of human knowledge of which they are quite ignorant. Like Mr. Brooke, in *Middlemarch*, they have at some time "looked into" every subject that can be mentioned in their bearing ; and the positiveness of their opinions reveals no doubt in their own minds that they have seen to the bottom of whatever they have looked into. Few fields are more attractive to "look into" than medicine, and the multiplicity of prescriptions that are offered by friends to any one who is indisposed is a matter of universal observation. Indeed, it is the neighbors and friends of the amateur therapist who have to bear the peril of the latter's well meant but dangerous interest. To take calomel and paregoric out of the hands of the officious old ladies and to direct their whole therapeutic efforts through the channel of sugar of milk is a positive boon to imperiled humanity.

Unfortunately, some of these amateur marksmen (to change the figure) do not fire with blank cartridges, whence come unfortunate

results. The Rev. Mr. Timins, vicar of West Malling, England, stands committed for trial on the charge of manslaughter for having caused the death of a young girl, aged seventeen, the daughter of a laboring man in his parish, by administering oil of bitter almonds. The girl was found ill by the vicar, and although medical aid might have been had without difficulty the clergyman fell a victim to what may be called the *cacoëthes præscribendi*, and sent for this drug, which, as he afterwards testified before the coroner, he had frequently used without ill-effects. The defense at the inquest was that the death was due to apoplexy, in spite of the fact that an autopsy clearly showed death to have been caused by prussic acid. At the second judicial examination this theory was abandoned, and it was claimed to be simply a case of accidental homicide. Dr. Bristowe testified that Mr. Timins, who was a fellow-student with him, had always showed an interest in the science of medicine, and had been frequently invited by Dr. Bristowe to visit with him the latter's patients in St. Thomas' Hospital. The magistrates, however, decided to let the case go a step further, and committed the clergyman for trial at the Kent Assizes. Of course it is to be expected that the good character and benevolent career of the defendant will prevent an adverse verdict being ultimately rendered, but the authorities seem disposed to make the matter of sufficient prominence to serve as a warning.

Almost coincidently with this event, we learn of a Belgian priest who performed the Cæsarean section under circumstances, however, quite different from those which tempted the English vicar to try his medical skill. A lady was seen by the priest, in his opinion *in articulo mortis*, and who was far advanced in pregnancy. He opened the abdomen and extracted twins, the woman, however, dying during the operation. In the ensuing investigation the priest testified that he made an attempt to find a physician or midwife before operating, and offered as his defense the urgency of the case and impossibility of procuring medical aid. The priest has been exonerated in three successive examinations, after each of which the public prosecutor has appealed, and that official now proposes to carry it before the *cour de cassation*, the ultimate tribunal.

If we may judge from the decisions thus far rendered, these two cases may be taken to illustrate the difference between an officious

assumption of duties that should be left to others and a reluctant acceptance of a heavy responsibility thrown unavoidably upon. It is the difference between the physician who draws up a will at the request of a dying patient when legal advice is inaccessible and the man who under no stress of emergency goes out of his way to usurp legal functions, his bungling discharge of which may cause miserable disaster.—*Boston Medical and Surgical Journal*.

TWO PICTURES—THE GOOD WORKER AND THE BAD.

We copy the following graphic sketches of two classes of laborers common to the profession everywhere. They were made by Dr. Andrew Clark in a recent address :

In the work of the younger members of our profession I see, or at least I think that I see, greater care, patience, and accuracy in observation, a more rigorous fidelity in the record of therapeutical experiments, wiser caution in speculation, graver deliberation in judgment, a growing frankness in the confessions of oversights and errors, increasing severity in the sifting and testing of their own conclusions, a readier effacement of personality in the work, less unseemly eagerness for mere priority of publication, a deepened sense of the responsibilities of premature speech and writings, a rapidly abating bitterness in the conflicts of opposing views a more robust and manlier spirit of scientific life, and less reluctance in making admission that there is no unconditional truth in the results of our inquiries—no finality in our finished work—no creed in medicine.

But, for one competent and conscientious worker there are ten incompetent and unconscientious, and who in divers ways hinder our progress and spoil our present possessions. Intolerant of the patient and painful toil of the true worker, acute in power of superficial observation, gifted with a certain showy versatility, quick at catching hold of new ideas, ingenious in guessing, crude in experiments, loose in therapeutic trials, hasty in speculation, strong in dogmatic assertions, accomplished in the transfiguration and use

of other men's work, finding what they want wherever they seek, unhindered by difficulties, facile in speech, ready in writing, thirsting for notice, such men, now, alas ! not uncommon in medicine, beget papers so quickly that they can have no necessary relation to time, observation, or thought, and flood our literature with their unworthy if not unveracious lucubrations.

The favorite hunting ground of such men is therapeutics, and their favorite sport is the catching of new remedies, the putting of them to new uses, and the setting forth of their successful results. These men discern no difficulties and have few failures ; they can illustrate their successes by scores of cases, and explain them by the most ingenious theories. There is scarcely any limit to the extent or the variety of their achievements ; and, as they flaunt along in the fulness of self-satisfaction, they look down with pitying condescension upon those in the strait and narrow way, who conscientiously toil with small success in seeking after truth, but who nevertheless, missing the praise of men, find strength and solace in the sacred search—*American Practitioner*.



INHERITANCE OF CANCER.

In the course of a paper on the Local Origin of Malignant Growths, read in the Section of Pathology at the last annual meeting of the British Medical Association, Mr. Jonathan Hutchinson observed : “ It is needful to say a few words as to the Inheritance of cancer in its bearings upon the doctrine of its local origin, since an adverse argument has been founded upon it. It has been urged with much plausibility, that a disease which is capable of inheritance must be a constitutional one. No doubt, to some extent, this is true ; but the argument must not be pushed beyond its legitimate scope. The laws of inheritance, as with property, so with disease, concern convection, and not origin or production. The inheritance of a fortune is a very different thing from its acquisition, and gives us no clue as to how that may have been accomplished. The causes of cancer, as we meet with it in practice, may, perhaps, be

usefully classed as three, senility of tissue, local irritation, and inheritance. Of these, only the first two can rank as true causes; the latter, although practically of great importance, is only a mode of perpetuation of that which the other two have originated. Senility gives proclivity, local irritation excites, and subsequently hereditary transmission may perpetuate. The facts, as regards chimney-sweeps' cancer, gives perhaps the best illustration of what I mean. Before this malady was practically suppressed by Act of Parliament, I believe it was commonly noted that when the trade of sweep went, as it often did, in a family, proneness to suffer from soot-warts, and for soot-warts to degenerate into cancer, increased in successive generations. Grandsons and great-grandsons were attacked at earlier ages, and with greater frequency, than those who were new to the trade. Here, then, we observe the liability to a form of cancer, produced in the first instance by a local cause, perpetuated and intensified by hereditary transmission. We witness the genesis of cancer, and see the shares taken by local irritation and inheritance, and how entirely secondary the latter is as regards the former. If we ask what it is which is inherited in the case of the transmission of cancer, probably the nearest approach to an answer which can be given will be to say that it is a peculiarity in cell-structure generally not germs, not a blood-malady, but a special type of cell-organization, permitting, with greater ease than in other persons, the injurious influence of local causes. Even in the sweep, whose forefathers have suffered from soot cancer, the transmitted tendency still waits for the exciting cause; and the disease occurs, not in internal and, therefore, protected parts, but on the same part as it did in his great-grandfather, and under the direct influence of exactly the same cause. Not that I would for one moment doubt that, in some instances, the inherited proclivity may be so strong, that it does not wait for the help of any exciting causes, but manifests its power in the production of a cancer which may be so strong, that it does not wait for the help of any exciting causes, but manifests its power in the production of a cancer which may be considered spontaneous. It is probable in this way that we ought to explain almost all cases of cancer occurring in very early life; and it may be the fact that, in a few of these, something more definite than mere tissue proclivity may be transmitted, possibly even

germinal matter, especially in those cases in which the parent was the subject of the malady. Thus, then, although I fully admit that in the examination of our patients we must make large allowance for the influence of inheritance, I wholly deny that we can allow it rank as a true cause of cancer.”—*British Medical Journal*.

DR. ENGELMANN ON THE MINOR FORCEPS.

The following is an extract from a letter from our friend, Dr. George J. Engelmann, of St. Louis, one of the most scholarly and accomplished obstetricians; the passage was not written for publication, but it is so valuable as giving the opinion and experience of one so well qualified to think and to act that we take the liberty of presenting it to our readers:

“I read with interest your article in the last number of the *American Practitioner*, and agree most thoroughly with you. Those *vest-pocket* forceps, as you call them, are not only miserable and useless, but even dangerous things. I should compare them to a dull knife, which may be used with comparative safety, as it does not cut as badly as a sharp one, and when a small or superficial cut is to be made the *dull* knife will do, and there is not so much danger as there is in the use of a sharp one.

“I have some experience—seeing quite a number of different styles, all very pretty and neat—of these little forceps. I thought I ought to try them, and finding one pair, very pretty and small, which I thought might prove serviceable, I bought it. Next day, Thanksgiving day, I shall never forget it on account of the cold dinner the little wretches—the V.P.F.—caused me. Fine, healthy lady, not a large child, good pains, every thing most satisfactory. As the head rapidly neared its exit, and a few more good pains would have expelled it, I thought now is the time for the V.P.F., as they would save the mother some ten or twenty minutes of suffering and allow me my dinner—this is what they are for—and to extract an additional fee, which they extract better than the head.

“I rapidly applied the little beauties, and was about to drag out

the little man in triumph. I waited for the next pain and pulled with one hand, supporting the perineum with the other; baby wouldn't budge; pulled harder, no go; took both hands, no better; then I began to pull in earnest, wouldn't stir. I pulled harder; finally pulled for all I was worth, without the slightest effect. The anxious father and expectant nurse had meanwhile given me up as a fraud, having with such a confidence promised the little one in a moment.

"I was provoked; took off the miserable little things; and for fear that nature would expel the child if I lingered, I hastily applied my old forceps, and *as a test* extracted the head with but *two fingers* on the instrument in less time than it takes me to tell you. Next day I returned the pretty toy to the instrument-maker and took out its value in silver wire.

"But they are dangerous; the obstetrician who has one may persist in its use and injure mother and child. I could not help but tell you of my experience since I see that you treat them with the same contempt. However, they deserve more than contempt; they are indeed toys, but dangerous like the toy pistol. They are to the obstetrician what a dull knife is to the surgeon; so do not ridicule them, but brand them and stamp them out."—*American Practitioner*.

[The V. P. F. are only intended for virgins, which our learned friend should have known.—ED.]

EXPERIMENTAL INVESTIGATION OF THE ACTION OF CHLORAL, OPIUM, AND BROMIDE OF POTASSIUM.

In an essay entitled, "An Experimental Investigation of the Action of Chloral, Opium and Bromide of Potassium," by Dr. Sidney Ringer, Professor of Medicine in University College, London, and Dr. Harrington Sainsbury, the authors make the following important observations on certain well-known drugs, after discussing the physiological effects of the agents mentioned in the title of their paper:—"Clinically, the dangers of bromide of potassium

and of chloral have been recognized ; and thus in our text-books, we find the statements that the presence of grave adynamic symptoms contraïndicate chloral and bromide of potassium. Opium, on the other hand, in such adynamic states, frequently appears to lend actual support. The results of definite experiment we find to accord with the results of clinical experience ; and the value of the former lies in that they confirm, and by their definiteness must tend to enforce, the teachings of the latter. The choice of a drug, is, however, no simple matter ; advantage here may be outbalanced by a disadvantage there ; and practical men may object that they would gladly give opium, but that the disordered stomach, blunted appetite, inactive liver, and torpid intestines, more than outweigh the advantages of opium administration. This clearly is a matter for consideration in the individual case under treatment ; and the decision will have to be according as one or other element, asthenia, or derangement of the digestive, etc., powers, is most to be feared. These objections to opium, on the one hand, and chloral and bromide of potassium, on the other hand, raise the question as to whether, in very many cases, a drug, at present rather extensively used, especially in America, viz., bromide of sodium, might not with advantage be substituted in their place. The salts of sodium generally contrast very markedly with those of potassium ; for the chlorides, bromides and iodides, of these two metals, the lowest figure would represent the potassium as ten times as active as the sodium. These precise numbers refer to action on the ventricle of the frog's heart (See *Medico-Chirurgical Transactions*, vol. lxy, concerning the action of the salts of potash, soda, and ammonia on the frog's heart), but on all hands the evidence is forthcoming that, whilst salts of potassium are very poisonous, those of sodium are very slightly so. One of the marked points of contrast between the two sets of salts is to be found in respect of inhibition ; potassium salts inhibit the frog's ventricle strongly, sodium salts scarcely at all. Here, however, we are considering drugs as to their cardiac effect ; and in respect of this, sodium bromide would rank far ahead of bromide of potassium, chloral, or opium, as to innocuousness. The objections holding for opium would not apply here, for sodium salts are generally very little disturbing to the tissues. With these advantages the general verdict of clinical experience is

to the efficacy of bromide of sodium as a hypnotic, and, indeed, as a substitute for bromide of potassium; and should this position but be maintained, it is clear that bromide of sodium will be in very many cases the sedative above all others to be selected."—*British Medical Journal*.

ANEURISM OF THE ORBIT TREATED BY LIGATURE OF THE COMMON CAROTID ARTERY.

In the *Vratch*, 1882, No. 13, there is a very interesting clinical lecture by Professor N. V. Sklifosovsky, of Moscow, on a case of idiopathic aneurism of the right orbit in a male non-syphilitic patient, aged 45, of moderately alcoholic habits, with chronic arteritis. All symptoms of the aneurism, viz., pulsating exophthalmos, œdema of the lids, dimness of vision, headache and earache, noise in the head, had been developed quite suddenly, no history of injury having been obtained. On examination of the patient about six weeks later, there were found, in addition to the above symptoms, total loss of vision, insensibility and opacity of the cornea, dilatation and immobility of the pupil, anesthesia of the lids and right half of the forehead, complete immobility of the eyeball, pulsation on pressure of the latter, blowing noise (like that of a pair of slowly working bellows) heard over the right eyeball and the corresponding temporal, parietal, and occipital regions, and disappearance of the subjective noises on compression of the right carotid at the level of the cricoid cartilage. The author diagnosed rupture of the right atheromatous right internal carotid within the cavernous sinus, under the influence of some accidental increase of arterial tension. After the failure of seven days' treatment by compression of the carotid (ten minutes every hour), and low diet, the artery was tied at the level of the cricoid cartilage. Four weeks later the state of the patient was found satisfactory; the opacity of the cornea, the œdema of the lids, and the exophthalmos had disappeared almost completely; the eyeball became movable (abduction, however, was parietic); cutaneous sensibility was

restored, and headache had ceased. The loss of vision, however, remained as entire as before the operation. Within five days after the ligature, there began to be developed a cataract of the right lens.

In the *Lancet*, December 3, 1881, pp 945-7, Dr. J. R. Wolfe describes another remarkable case of this rare affection, cured by the same operation.—*London Medical Record*.

[A similar case was reported by Dr. Sexton, of Raleigh, at the Asheville meeting of the State Medical Society, 1881.—Ed.]

A PROGNOSTIC SIGN IN PNEUMONIA.

Dr. J. B. Sullivan, of Stanton, Michigan, contributes the following :

I have had considerable experience in the treatment of pneumonia, and have realized, as every practitioner must, that it is a formidable disease. I think I have detected a symptom which, when discovered, indicates an unfavorable prognosis, and the absence of which, justifies a promise of recovery. I have relied on it for twenty years. In a case of typical pneumonia we have five stages, viz., engorgement, red hepatization, gray hepatization, suppuration and resolution. Dr. Stokes describes a stage of arterial injection, before engorgement, but I am content with regarding this as the first stage. Engorgement is congestion of the pulmonary vessels. During red hepatization the lung has a dull reddish-brown tint, and in this stage the sputa will reveal a breaking down of the lung substance, if such destruction is taking place. The pleura almost invariably participates in the inflammatory changes when the superficial portion of the parenchyma is affected. When red hepatization has existed for some days (as it usually does) the color becomes paler and whiter. Gray hepatization succeeds the red and its occurrence may be detected by the color of the sputa. It is at the onset of this stage that we have our sign. If the stage of red hepatization, as indicated in the characteristic reddish sputa, do not continue, for at least thirty hours the patient will die. This has been my experience. Practical physicians make a note of it, and report your observations in the *Age*.—*The Medical Age*.

THE DELIGATION OF LARGE ARTERIES BY THE APPLICATION OF TWO LIGATURES AND THE DIVISION OF THE VESSEL BETWEEN THEM.

Mr. W J. Walsham, F.R.C.S., Assistant Surgeon to, and Demonstrator of Orthopædic and Practical Surgery at St. Bartholomew's Hospital, writes: "During the past autumn, whilst in charge of Mr. Willett's wards, it fell to my lot to tie the femoral artery three times for popliteal aneurism. In each instance two ligatures were applied, a little less than half an inch apart, and the artery completely divided between them. The ligatures used were kangaroo-tail tendon; the wounds did well; the operations were performed strictly antiseptically; and in each instance the patient made a good recovery. If two ligatures be applied, and the vessel divided between them, all risk of too free a separation of the sheath is absolutely avoided, as one ligature can be applied at the spot where the sheath is separated above, and the other where the sheath is separated below. After the vessel is divided, each cut end retracts, drawing the respective ligatures well into the sheath, thus leaving the blood supply of no portion of the vessel on the proximal and distal side of the upper and lower ligatures respectively in any way interfered with. The artery is thus placed under very nearly the same conditions as one which has been ligatured in a stump, and exactly under the conditions as one the ends of which have been secured in a wound, and from such secondary hemorrhage is very rare. Indeed, I am not aware that, after the two ends of a divided vessel have thus been tied in a wound, hemorrhage, except from the slipping of a ligature, has ever occurred. The normal longitudinal tension of the vessels constitutes another, and, I believe: not inconsiderable source of danger in ligaturing an artery in its continuity. A transverse wound of an artery, as first pointed out by Mr. Savory, in consequence of this elastic tension, assumes a diamond shape. Should any part of the ligature cut through the vessel before it has become permanently occluded, this tension, by causing such a cut in the vessel to gape, thereby disturbing the connection of any internal clot that may have formed, or adhesions of the coats that may have taken place, must tend to the production of secondary bleeding. In a case of secondary hemorrhage, under the late Mr.

Callender, on cutting down at the seat of ligature to secure the bleeding points, the hemorrhage was clearly seen to be due to such a cause. The vessel which had been secured by a catgut ligature, had given way opposite the knot (which itself was intact), and a gaping wound one-tenth of an inch wide existed in the walls of the vessel. By applying two ligatures, and dividing the vessel between them, all tension is taken off, and both ends are placed in a state of rest—the most favorable condition for healing. It has been objected that the application of a second ligature and division of the artery detracts from the simplicity of the operation—a point I suppose, other things being equal, always to be aimed at in surgery. In this instance, such an objection appears to me to be a mere question of sentiment, and, as such, I venture to think, is of little moment, if, as I believe, it is a fact that, by using two ligatures and dividing the artery between them, greater safety is obtained.”—*British Medical Journal*.

ON THE PATHOLOGY OF DIABETES: ESPECIALLY DEALING WITH DIABETIC COMA.

Dr. Stephen Mackenzie, Physician to, and Lecturer on Medicine at, the London Hospital in a paper bearing this title, and originally read before the British Medical Association at Worcester in 1882, gives a total of thirty-seven fatal cases, twenty-one of which have been under Dr. Mackenzie's own care, it appears that coma and phthisis are the two most common modes of termination of diabetes. Coma is a much more common ending of diabetes than is often supposed by those who see but few cases of the disease. In this series, coma of a peculiar kind was the termination of diabetes in nineteen out of thirty-seven cases, or in just over half the number. Of these nineteen cases of coma, in seven *post mortem* examination showed no gross visceral disease to which the coma could be attributed; in four cases without *post mortem* examinations, there was no *ante mortem* evidence of visceral disease in three, and in one there were well marked signs of pneumonic phthisis during life.

Further there were eight deaths from coma, with old or recent pulmonary disease found at the necropsy; in some of these the affection of the lung was insignificant, in others advanced. The coma that closed the scene in the case of diabetes, implicated (or followed) by pulmonary disease, had certain special characters, to be presently described, showing its connection with the diabetic rather than with phthisis. It was not the mere loss of consciousness that terminates so many exhausting diseases. Suddenly developing coma is an unusual ending of ordinary phthisis. Besides these nineteen cases, in three others death was by coma, but an obvious explanation was presented on *post mortem* examination—viz., cerebral hemorrhage, meningitis, suppurative nephritis. *Onset*.—pain in the epigastrium or hypochondria, often very severe, sometimes ushers in the attack, and may precede for several days the coma. Delirium, usually of a light garrulous kind, is observed in some cases. Rapidity of pulse is occasionally the first indication of impending coma. Vomiting and diarrhœa, separately or together, was noticed in some cases for a day or two before the attack. Severe headache precedes the coma in others. Fatigue, as pointed out by Prout, and noticed by nearly all who have written on the subject, often determines coma, and the latter is thus frequently induced by a journey.

Special Features of the Coma.—One of the most striking symptoms in most, though its degree varies in different cases, is a peculiar laborious breathing—an “air-hunger,” extraordinary efforts of filling the chest being made. The patient lies gasping for breath, like a person after violent exercise, whilst no condition in the respiratory organs accounts for its occurrence. Sometimes, this dyspnœa precedes the coma, sometimes the dyspnœa and coma appear together. The coma in most cases commences gradually. The patient can at first be roused, but it steadily progresses until it is profound. It occasionally commences more abruptly, and in a few cases passes off, usually to return. The surface of the body is generally cold, and the skin and mucous membranes livid; the pulse is rapid and small, and ultimately becomes uncountable. The external and internal temperature sinks exceedingly low, and Dr. Mackenzie has known the temperature in the rectum to be little over 90° F. This combination of coldness, lividity, and rapid pulse has led me for some time to call the condition “coma-collapse.” Incontinence of urine

is noticed in some patients. The breath has been noticed by some good observers to have a peculiar odor, like sour beer, vinegar, acetic ether, acetone, etc. ; but in no case that Dr. Mackenzie has observed has this been detected, though he has been on the outlook for it since 1874, and have directed the attention of those watching the patient to the point. Dr. Frederick Taylor's experience is similar. It has been said that a high temperature is necessary for its occurrence, owing to the low volatility of acetone. The urine is also said sometimes to give off a similar odor, but the author has not noticed it even when evaporated. In some cases, the addition of a solution of perchloride of iron to the urine produces a deep brown color. This, which is a test for acetone, Dr. Mackenzie has noticed in some cases."—*British Medical Journal*.



LITTELL'S LIVING AGE.—The numbers of *The Living Age* for March 31st and April 7th contain *Corea, Quarterly* ; *Siena, Contemporary* ; *Le Marquis de Grignan, Cornhill* ; *The Vulgar Tongue*, and the *Humerous in Literature, Macmillan* ; *Francis Lieber, St. James' Magazine* ; *Sketches in the Malay Peninsula, Leisure Hour* ; "John Inglesant" on Humor, and *Spoiling the Lakes, Spectator* ; John Richard Green, *Athenæum* ; with Instalments of "No New Thing" and "The Ladies Lindores," and the usual amount of Poetry.

The number for April 7th begins a new volume.

A new volume began with the first number of January. For fifty-two numbers of sixty-four large pages each (or more than 3,300 pages a year) the subscription price (\$8) is low ; while for \$10.50 the publishers offer to send any one of the American \$4.00 monthlies or weeklies with *The Living Age* for a year, both post-paid. Littell & Co., Boston, are the publishers.

THE ALIENIST AND NEUROLOGIST for April, 1883, sustains the promise which the first issue of this Journal gave, of presenting a first-class quarterly journal of scientific, clinical and forensic psychiatry and neurology. Not only to the specialist but to the general practitioner such a journal is eminently useful.

TIME OF THE ARRIVAL OF TRAINS IN TARBOROUGH.

Dr. Staton has kindly presented us with the following information, for the members of the State Medical Society and visitors :

The Society meets in Tarborough on Tuesday the 15th of May, the first session to be held probably at 12 o'clock.

The Wilmington & Weldon trains arrive at 8 o'clock A.M., and 6:20 P.M.

The A. & R. train arrives at 10 A.M.

The boats, whenever the water in the river will admit, arrive late in the afternoon.

BOARD OF EXAMINERS.

The Board of Medical Examiners is constituted as follows :

Dr. P. E. Hines, President, and Examiner in Materia Medica and Therapeutics.

Dr. T. D. Haigh, Anatomy.

Dr. Geo. L. Kirby, Physiology.

Dr. Thomas F. Wood, Surgery.

Dr. Joseph Graham, Practice of Medicine.

Dr. R. H. Lewis, Chemistry and Pharmacy.

Dr. H. T. Bahnson, Secretary, and Examiner in Obstetrics.

Communications addressed to the Secretary or any member of the Board will receive attention.

The Board will meet on Monday, the 14th of May, and remain in session until all candidates are examined.

License fee is \$10.

CHAIRMEN OF SECTIONS.

The following are the Chairmen of Sections :

Dr. R. L. Payne, Jr., Lexington—Surgery.

Dr. H. B. Fergusson, Littleton—Therapeutics and Materia Medica.

Dr. Geo. W. Long, Graham—Practice of Medicine.

Dr. F. A. Crowell, Monroe—Microscopy and Pathology.

Dr. J. M. Hadley, La Grange—Obstetrics and Gynecology.

Dr. A. G. Carr, Durham—Diseases of Children.

Any communications addressed to the above gentlemen, will be properly attended to. We take the liberty of saying that the Chairmen of Sections are helped but little by members interested, and this makes their work peculiarly difficult.

THE COLLECTIVE INVESTIGATION OF DISEASE.

After duly considering the plan adopted by the *British Medical Association* on what has been named the "Collective Investigation of Disease," we believe that it would be well for our State Society to inquire into the propriety of adopting it as a promising method of bringing together the experience of the profession upon any given subject.

We offer the following suggestions :

Let a committee be formed to propound the subject of investigation, and to elaborate a plan of reporting. Let the same committee present to the Society before its adjournment the questions they suggest that they may be revised and amended. Then the preparation of blanks for distribution would follow, and the answers to questions propounded sent in should be carefully edited, and the report presented at the next meeting.

If a good subject be selected, and an active committee be formed, the results must be good. In order to make a reply worthy of the name, note-taking must be done habitually by the reporter ; and if the movement were worth nothing more than to induce physicians to make daily note of their more important cases, it will have accomplished an excellent purpose.

The committee could easily devise a blank to be distributed to all their correspondents which would serve to remind the busy doctor of items that might otherwise escape him, and it might be so framed as to shorten the labor of note-taking.

That other committees of investigation have failed in the past, is no objection to the plan we propose. There are enough vigorous working members in our body to make a success of it, and the columns of the JOURNAL are at the disposal of the committee, or for any other good work of the Society.

A CORRECTION.—Our attention has been called to an error we fell into in our notice of the stand taken by recent North Carolina graduates of the Medical College of South Carolina. We gave only the name of Dr. Booth, of Granville, having received distinguished mentioned, where Dr. J. M. Hays, of Granville, graduated second. Dr. Cobb, third, and Dr. Booth, fourth. We desire to do justice to our promising young friends, and trust they may attain still higher distinction. Dr. Hays is one of *internes* of the Charleston City Hospital, where he will remain a year previous to entering upon practice in Granville.

THE PHARMACOPEIA OF THE UNITED STATES.—The *British Medical Journal* devotes a large share of its Review space to the above volume. Never before in the history of the Pharmacopœia has there been so much to criticise, and it may now be truly said that this great work has been taken from its secluded corner, and is now sure of a successful future.

THE EFFORTS TO SUSTAIN THE NEW CODE.—The New York *Medical Record* is taking comfort from the fact that several medical journals, among them a few in the South, “comment on the movement with great fairness.” A slender ground of support we take it, for if there is anything more certain than another, it is that there is a “Solid South” opposed to any change, whatever, of the old Code.

We are sorry to see New York fall under such evil influences, when her schools were fast becoming considerable rivals of those of Philadelphia.

PROGRESS OF MEDICINE

TREATMENT OF PSORIASIS BY LARGE DOSES OF IODIDE OF POTASSIUM.—Greve (*Tidsskrift for prakt. Med*, No. 16, 1881; abstract in *Viertelj. für Derm., und Syph.*, Heft 3, 1882) states that iodide of potassium in large doses is a certain cure for psoriasis. He begins with small doses, increasing them gradually until tolerance is established. When a dose of 15 grains has been reached the curative effects begin to be observable, but when a dose of 30 to 45 grains has been reached, the disease begins to quickly disappear. This statement of Greve is confirmed by Boeck.—*London Medical Record*.

ACTION OF OZONE ON BLOOD.—Binz has investigated the action of ozone on blood (*Centralbl. für die Med. Wiss*, 1882, No. 11), and has found that, passed for a considerable time through a large volume of defibrinated blood, ozonized air produces no visible microscopical or spectroscopic change in the blood. If the quantity of blood were small, the ozone darkened its color and altered its spectrum; and, when microscopically examined, the corpuscles were observed to be unbroken and to have swollen up and become globular. A solution of oxy-hæmoglobin, similarly treated, was after a short time rendered muddy and brown, and, after a longer time, yellowish-green, with an acid reaction. In every case, the whole of the ozone did not disappear from the air in its passage through the blood. The negative effect of the ozone on a large quantity of blood agrees with what the author has observed in the blood of animals which have been kept sleeping for hours by means of ozonized air.—*London Medical Record*.

URÆMIA OF HEPATIC ORIGIN.—M. Débove read a note before the *Soc. Méd. des Hôp.* on this subject. According to Brouardel, the urea is diminished in hepatic disorders. Débove's researches confirm this, though he interprets the fact differently from Brouardel. The diminution of the amount of urea may be explained by two theories: some difficulty of excretion of urea in the kidney, or some fault of formation in the liver. The latter theory has been adopted by Brouardel and most other authors. To prove it, he has

attempted to show that the blood-urea (as opposed to the urine-urea) is equally diminished, and consequently the liver makes a smaller quantity of it; but Débove's experiments do not confirm this. As a result of his researches, Débove thinks that, from a therapeutic point of view, there is indication to determine polyuria in patients affected with grave icterus, in order to facilitate the elimination of extractive matters, such as have been recognized by Bronardel, A. Robin, Mossé. He thinks that this should be done in all cases of icterus.—*Journal de Méd. de Paris*, March 24, 1883.

PULSATILLA.—We have no exact knowledge as to the action of this new officinal. It has been employed in Germany and other parts of Europe, especially by homœopathic practitioners, by whom the drug is much used for the relief of amenorrhœa and dysmenorrhœa. Given in infinitesimal amounts, with due ceremony as to dilution, tumblers, and spoons, to credulous, hysterical women, it may sometimes be of service; but whether it has any other application is very doubtful. * * * Dr. Peters, of New York, believes that therapeutically it is nearly equal to senega.—*New U. S. Dispensatory*.

ANTAGONISM OF OPIUM AND NICOTIN.—Bonaccorsi (*Archiv. Med. Ital.*, Fasc. iii. and iv.) gives the continuation of his studies on the antagonism of various remedies, which he began in 1877 with opium and belladonna. His experiments were made on rabbits, guinea pigs, and frogs. From the results obtained with morphia and nicotin, together and separately, and with morphia and hyoscyamin, morphia and aconitin, and morphia and daturin, he arrives at the following conclusions: 1. The antagonism between morphia and nicotin is a demonstrated fact. 2. There is no antagonism between morphia and aconitin, hyoscyamin, or daturin. 3. Opium and morphia act particularly on the cortical part of the brain, and on the arachnoid, producing hyperæmia, congestion, paralysis, especially of the vasomotor and of the respiratory centres. 4. Nicotin acts particularly on the brain and medulla oblongata, at first irritating it, and in prolonged action paralyzing the nerves which arise from it. 5. Neither morphia nor nicotin has any special action on the blood, liver, kidneys, or bladder. 6.

Opium has a depressing action on the splanchnic nerve, while nicotine excites the intestinal ganglia. 7. Death with morphia and nicotine is by asphyxia, with morphia by its paralyzing action, with nicotine by its tetanizing action on the centre of circulation. 8. In poisoning with nicotine, opium or morphia is to be preferred to any other remedy.—*G. D'Arcy Adams, M.D., in London Medical Record.*

A NEW OPERATION FOR PTOSIS.—The *New York Med. Jour.*, January 6, 1883, says that Wecker ("Ann. d'Oc.," July-August, 1882) describes a new operation for the relief of ptosis. He dissects up an oval flap of skin and orbicular muscle for a space of four or five millimetres in length along the free border of the lid. He then passes a suture through the skin above the eye-brow, about the width of the finger above the superior orbital margin, beneath the skin and muscular tissue, and brings it out at the upper part of the wound, beneath the divided orbicular muscle. He then introduces the needle again beneath the orbicular muscle near the inferior margin of the wound, and brings it out through the middle of the bridge of skin just above ciliary margin. Then, making a bridge of five or six millimetres in length along the free border of the lid, he passes the needle and suture in a reverse direction, and brings it out just above the eyebrow. A second suture is also introduced, just like the first, and at a centimetre from it. Slight traction suffices to completely close the wound, and the two ends of each suture are then tied over a little roll of kid. The results have been very satisfactory.

A PRESCRIPTION FOR ACUTE RHEUMATISM.—In acute rheumatism, as early as possible in the case, give the mixture described below, in the diluted form in which I have prescribed it. Do nothing else, except to pack the painful joints in wraps of very loose cotton-wool, covered with light flannel; not oil-silk or any other vapor-proof material. \mathcal{R} tincturæ aconiti (*P. B.*) $\mathfrak{M}\text{xii}$; ammonii sulphidi $\mathfrak{M}\text{xvi}$; aquæ menthæ viridis destillatæ \mathfrak{z} vj . The dose is a fourth part, every fourth, or, in severe cases, every third hour, until the pain is relieved and the "fever" has abated. The mixture should not be prescribed in large quantity than will suffice for

four doses, on account of the tincture of aconite, and, more especially, the tendency of the sulphide of ammonium to decompose and deposit sulphur.—*J. Mortimer Granville*, 16 *Welbeck Street*, in *British Medical Journal*.

BRESGEN ON BRONCHIAL ASTHMA AND ITS RELATION TO CHRONIC NASAL CATARRH.—The author is convinced (*Prager Med. Wochenschr.*, No. 25, 1882) that in all asthmatic patients chronic inflammation is present in the nose, and probably throughout the upper air-passages, which it should be the first aim to relieve. Next in importance to the galvano-cautery treatment is painting the mucous membrane of the pharynx and nose with iodide of glycerine, and blowing powdered nitrate of silver into the nose. The reporter of this paper, Dr. Schutz, has during the past year observed three cases of pronounced bronchial asthma. In one case there was extreme chronic swelling of the nasal mucous membrane, over the spongy bones and in the naso-pharyngeal space. In the second case, there was chronic thickening of the mucous membrane of the spongy bones and granular pharyngitis. In the third case there was chronic naso-pharyngeal catarrh. In a fourth case, seen and described by him a few years ago, extensively spreading papillary growths were found on the nasal mucous membrane. In all these cases the impediment to the passage of air through the nose, and the nasal character of the voice, led to a suspicion of an affection of the nasal cavity. In two cases only, where the asthma had existed for years, was a local treatment adopted, and the improvement here obtained was lasting.—*London Medical Record*.

TREATMENT OF PROLAPSUS OF THE RECTUM BY HYPODERMIC INJECTIONS OF ERGOT.—The *Paris Médical* quotes from M. Jette's thesis some interesting facts concerning this mode of treating prolapsus of the rectum, originated by M. Vidal, of the Saint Louis Hospital. It is essential that the solution of ergot should be pure. The injection is made with a Pravaz's syringe at about one-fifth of an inch from the anus, parallel to the intestinal wall. The needle should penetrate one to two or even four centimetres deep, that is to say, as far as the fibres of the sphincter. M. Vidal advises that only one injection should be made instead of two or three in suc-

cession at different places, a method sometimes adopted in the belief that pain is thus avoided. M. Vidal believes that the pain is equally great, and unnecessarily repeated. He recommends that the injection be made very slowly as the best means of lessening the pain. M. Vidal has injected a hæmorrhoidal tumor sometimes from its cutaneous, sometimes from its mucous, surface; in both cases the pain was great, the tumor became brown and tense, but was very favorably modified without the formation of an abscess. The duration of the treatment varies from days to weeks. It is not affected by the solution used, the quantity injected, or the intervals between the injection. In order that the cure should be permanent, it is advisable to continue the injection for a short time after apparent recovery. Dr. O. Gorgues, commenting (*Jour. de Méd de Paris*) on M. Vidal's mode of treatment, expresses a belief that it could only be adopted in treating adults, with a view to obviate operative treatment; and mentions that electrolysis has been used successfully in some instances by introducing the needles of the electrodes into the substances of the fibres of the sphincter.—*London Medical Record*.

An excellent article, reprinted from the *Glasgow Medical Journal*, and written by Dr. James Whitson, is on some of the advances which have been made in surgery during the last decade. We allow ourselves one extract:

“A totally different method of dealing with abscesses is now carried out as compared with the practice of even recent years. Formerly, after incising the cavity and pressing out the contents, the case, with the exception of frequent syringing, was almost entirely left to nature, while recovery in most instances was tedious. At the present time, and with antiseptic precautions, a much more vigorous line of treatment is adopted, and we have no hesitation in removing the pyogenic membrane *en masse*, interference with which older surgeons looked on with disfavor. In order to accomplish this, we make use of Volkmann's spoon, and if the whole of the inflammatory products contained in the cavity are scraped out, two healthy surfaces are left opposed to each other, and which speedily becoming covered with granulations soon coalesce. During the process of healing the less the parts are disturbed the better, and syringing the

cavity irritates the tissues composing its walls, and leads to increased discharge—while the progress of cicatrization is interfered with, and as a natural consequence recovery instead of being accelerated, is considerably retarded.”

THE USE OF IODINE AS A STOMACHIC SEDATIVE.—The employment of iodine for the relief of the vomiting of pregnancy has been somewhat in vogue for a number of years. And while the success attending its use has been somewhat in vogue for a number of years. And while the success attending its use has been pointed out with more or less enthusiasm, its exact value has never been established. Dr. T. T. Gaunt (*Amer. Journal of the Medical Sciences* for April, 1883) has for a number of years been employing the compound tincture of iodine in drop doses in nearly all forms of emesis, and reports thirteen cases of the most varied character, in all of which vomiting was promptly arrested by the use of this drug.

TOBACCO STATISTICS.—The most recent returns on the production of tobacco in various countries give the following results: Asia produces 31,000 quintals (100 pounds avoirdupois) of tobacco; Alsace-Lorraine, 160,000; Bavaria, 156,000; the Duchy of Baden, 242,000; North Germany, 100,000, of which Prussia furnishes the fourth part; the Low Countries furnish 85,000 quintals; Italy, 93,000; Russia, 180,000; Austria, 1,000,000. In America the Brazils produce 300,000; Cuba, 610,000; North America, 3,400,000. The total quantity produced amounts to 18,000,000 quintals. The annual quantity consumed in Russia, France and England, is at the rate of 1 pound per inhabitant; in Italy at the rate of $1\frac{1}{2}$ pounds; in Austria 2 2-5th pounds. In the United States and Germany 3 pounds; in Belgium 4 4-5th pounds; and in Holland 5 3-5th pounds.—*London Medical Record*.

THE importation of artificial eyes in the United States is about 10,000 annually, and recently the manufacturing of them has become a home industry.—*London Medical Record*.

NOTES.

THE ANNUAL ADDRESS before the Medical Society at Tarborough will be delivered by Dr. Wilson. Subject: "The Right Relation of the General Public to Sanitary Service."

OIL OF TURPENTINE mixed with water and chloride of lime, and then distilled, yields a liquid which M. Chantard found to be identical with chloroform.—*New U. S. Dispensatory*.

ADVICE GRATIS.—"The little boy of my *concierge* having fallen ill, I inquired about him of his father, and learned that he was attended by a doctor who lived a long way off, while there is one who resides on the premises. Expressing my surprise at this, 'Well, what to do?' replied the porter. 'M—— is perhaps a good doctor, but I have no confidence in him.' 'How so?' 'Why, you see,' replied the *concierge*, lowering his voice, 'He gives advice gratis.'"—*Lyon Méd.*—*Med. Times and Gaz.*

THE MARYLAND MEDICAL JOURNAL, which has been steadily gaining ground since its beginning, and more especially in its semi-monthly form, is about to appear as a weekly. This is a fair index of a degree of prosperity, but not a whit too high for the medical profession of Baltimore to have attained long ago.

Baltimore, from the beginning of the century, has been noted for the sterling accomplishments of her physicians and surgeons, but they have never been so prolific with their pens as their Northern confreres. We take it that the influence of the *Maryland Journal* has been good in stimulating a more active literary life, and we wish the *Journal* great success in its weekly issue.

CHAPMAN'S BOTANY OF THE SOUTHERN STATES.—For the information of several of our readers who have inquired of us on the subject, we are pleased to announce that a new edition of Chapman's Botany of the Southern States will be ready this month. It has been, for several years, out of print, but the new edition has a supplement of 96 pages, added by Dr. A. B. Garber, and Messrs. A. H. Curtiss, Chas. Mohr, and Dr. Gottinger. Seventy-eight genera,

and about 450 species are added to the flora, making this volume, with Curtis' N. C. Catalogue, the indispensable guide to the study of Southern plants. The volume will be published by Messrs. Ivison, Blakeman, Taylor & Co., of New York.

IMPORTATION OF OPIUM IN THE UNITED STATES.—It is stated in the *Philadelphia Medical Times* of December 2, 1882, that in the year 1880 there was imported into the United States the enormous quantity of 372,000 pounds of opium, which is equivalent to nearly three million of doses. But the United States is a large country, and so even this enormous number of doses means only one dose a year for every sixteen persons. When it is remembered how freely opium is used externally it would seem probable that the quantity is not beyond what is required for proper medical use, and that the opium habit about which so much is written requires no perceptible allowance for its gratification.—*London Med. Record*.

DANGER FROM HAVANA.—From the 17th to the 30th of March, six vessels arrived at Charleston, South Carolina, from Havana, Cuba, with foul bills of health. They became infected with yellow fever during their stay in Havana, and lost twenty men by death from this disease, out of the sixty-nine which constituted the aggregate of their crews. No sickness occurred during the voyage, and none since their arrival at the Charleston quarantine station. This extent of disease in Havana so early in the season, appears to Dr. F. Grange Simons, Chairman of the Committee on Quarantine of the State Board of Health, to urge the need for special care, lest the disease be brought to our shores prior to the time when the stricter rules of quarantine are applied. Dr. Simons has notified these facts to the National Board of Health, and proposes bringing them before the State Board at its quarterly meeting, that suitable action may be taken.—*Philadelphia Medical News*.

DOMESTICITY AS A CAUSE OF INSANITY.—Mrs. M——, aged 44, mother of eight children, had acute mania. The husband, when asked if he could suggest any cause for her illness, exclaimed with much animation that he could not conceive any reason. 'She is a most domestic woman; is always doing something for her children,

is *always* at work for us all ; *never* goes out of the house, even to church on Sunday ; never goes gadding about at the neighbors' houses, or talking from one to another ; has been one of the best of wives and mothers, and is *always* at home." The superintendent of the Hartford Retreat for the Insane (from the report of which institution this case is taken), in commenting on it, says : 'This appreciative husband could hardly have furnished a more graphic delineation of the causes of his wife's insanity, had he understood them ever so thoroughly.'—*London Medical Record*.

GAILLARD ON THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.—If any of our readers doubt that Dr. Gaillard has superior gifts as a writer, let them read the editorial in the issue of his Journal of the 21st of April, entitled "Plain Language upon a Delicate Subject."

His argument is to show the indelicacy of selecting Dr. N. S. Davis, from a Committee of which he was a member, to fill the position of trust and emoluments ; to show that the appointed editor while for a generation intimately identified with the fortunes of the American Medical Association, is not an accurate man, and his writings show that he is not *au courant* with medical literature ; that his age forbids reasonable expectation that he will live to see his work well established, and that the imposition of such a trust upon a man of Dr. Davis' years is a mistaken judgment.

Dr. Gaillard's description of the duties and attainments of a medical editor, must strike his confreres as an indication of a mature conception of its duties and responsibilities.

We fall in easily with Dr. Gaillard's conviction of the situation of the proposed Journal, and whether he be right or wrong, we cannot help feeling a regret that the trustees had not secured his services, if he could have been prevailed upon to relinquish his own Journal.

THE HOLMES BANQUET.—The Philadelphia *Medical News* of the 21st gives an account of the banquet given to Dr. Oliver Wendell Holmes, in New York, on the evening of the 12th.

These naughty old boys must have made things lively in Delmonico's, when over two hundred saw-bones got together. We give

a mere taste of it in Dr. A. H. Smith's verses of welcome, and Mr. Whitelaw Reid's "Good Night."

Dr. Holmes' poem of the occasion showed no abatement of the poet's fire, and of a true ripeness of soul.

" You've heard of the deacon's one-hoss shay
Which, finished in Boston the self-same day
That the City of Lisbon went to pot,
Did a century's service, and then was not
But the record's at fault which says that it bust
Into simply a heap of amorphous dust ;
For after the wreck of that wonderful tub,
Out of the ruins they saved a hub ;
And the hub has since stood for Boston town,
Hub of the Universe—note that down.
But an ordinary hub, as all will own,
Must have something central to turn upon,
And, rubber-cushioned, and true, and bright,
We have the axle here to-night.
Thrice welcome, then, to our festal board
The doctor-poet, so doubly stored
With science as well as with native wit ;
Poeta nascitur, you know, *non fit*,
Skilled to dissect with knife or pen,
His subjects dead or living men,
With thoughts sublime on every page
To swell the veins with virtuous rage,
Or with a syringe to inject them
With sublimate to disinfect them ;
To show with demonstrator's art,
The complex chambers of the heart,
Or armed with a diviner skill
To make it pulsate at his will ;
With generous verse to celebrate
The loaves and fishes of some giver,
And then proceed to demonstrate
The lobes and fissures of the liver ;
To soothe the pulses of the brain
With poetry's enchanting strain,
Or to describe to class uproarious
Pes hippocampi accessorious ;
To nerve with fervor of appeal
The sluggish muscles into steel,
Or, pulling their attachments show
Whence they arise and where they go

To fire the eye by wit consummate,
 Or draw the aqueous humor from it ;
 In times of peril give the tone
 To public feeling called backbone,
 Or to discuss that question solemn
 The muscles of the spinal column.
 And now I close my artless ditty
 As per agreement with committee,
 And making place for those more able,
 I leave the subject on the table.

“ Yet one word more. I’ve had my pride
 As *medicus* most sorely tried.
 When Englishmen who sometimes show
 Of things American, you know,
 An ignorance that is melancholy ;
 As Dr. Holmes is very jolly,
 Assume that he must therefore be
 A Doctor of Divinity,
 So to avoid all chance of wrong
 To medicine, or church, or song !
 Let Dr. Holmes discarded be
 For Oliver Wendell Holmes, M.D.

“ And now, for I really must come to an end,
 May the fate of the chaise be the fate of our friend.
 May he never break down, and never wear out,
 But a century old, or thereabout ;
 Not feeling the weight of the years as they fly,
 Simply stop living when ready to die.”

“ It was nearly midnight when Mr. Whitelaw Reid, of the New York *Tribune*, rose to reply to the last toast, ‘ The Press.’ He said :

“ ‘ If you are finding out by his poor words and halting manner how little and unimportant the mysterious ‘ We’ of a big newspaper may be, what do you think of your own exhibition ? There are here present at least a dozen of you from whom I myself have heard the most solemn and magisterial instructions as to how one should live. Avoid late dinners ; avoid crowded rooms ; eat simply ; drink sparingly ; don’t smoke ; three courses for your dinner and a single glass of wine ; keep your dining room cool ; avoid drafts ; be sure to have the air pure and fresh ; never sit over an hour at table ! Ah, yes ; those are the familiar formulas. Every one of you

remembers them ; every one of you has given them a thousand times, and taken a good fee for it every time. Now we've got you out from behind the screen. This must be what you meant by it. This is the way you live. This is where the fees go. The united skill of two hundred doctors, concentrated upon the single problem of hygiene, how to produce for themselves the best and most wholesome way of dining, has resulted in this. [Laughter.] Well, well, it may be naughty, but it's nice ; and we are more obliged than we can tell you for being shown at last, so satisfactorily and on the highest medical authority, just what 'Plain Living and High Thinking' mean."

IT SERVED THEM RIGHT.—The value of intelligent sanitary legislation and the penalties of its neglect are every now and then made painfully apparent to all.

The latest instance comes from North Carolina, and we note the following from the NORTH CAROLINA MEDICAL JOURNAL, for March, 1883 :

"In our remarks on the Defeat of Public Health Legislation, (February) we hinted at the shocking violation of decency and sanitary rules, constantly practiced in the Capitol. Since then we get news of some of the practical results of these abuses in the serious illness of two clerks employed at the Capitol. Their disease is typhoid fever, and there is at present no doubt that the cause of the disease is directly due to the unhealthful conditions of the atmosphere in which they worked.

"It is shameful that of the number of representatives assembled at Raleigh during this winter, that not a man raised his voice in condemnation of the filthy practices there enacted.

"If ever a State needed the sanitary advice of a Board of Health, and a one-man power to execute unflinchingly this advice, that State is North Carolina.

"The victims of the pestilence-breeding air have our earnest sympathy, and we only wish that it could have fallen to the lot of members of the Legislature, instead of the innocent; then, perhaps, we would have had a sanitary reform inaugurated in the future."

While we sympathize with any sick person, yet we repeat, "it served them right" ; for they helped to put in power these very men, who so shamefully neglect the most important duty they owe their fellow-men.—*Philadelphia Medical and Surgical Reporter*.

[We don't like to spoil so useful a moral but unfortunately for the *Reporter* the clerks were females.—ED.]

AN INSTANTANEOUS LIGHT.—Such in a word is the unique apparatus on exhibition at the rooms of the Portable Electric Light Co., 22 Water Street, Boston. It occupies the space of only 5 square inches and weighs but 5 lbs, and can be carried with ease. The light, or more properly lighter, requires no extra power, wires or connections, and is so constructed that any part can be replaced at small cost. The chemicals are placed in a glass retort; a carbon and zinc apparatus, with a spiral platinum attachment, is then adjusted so as to form a battery, and the light is ready. The pressure on a little knob produces an electric current by which the spiral of platinum is heated to incandescence. The Portable Electric Light Company was recently incorporated, with a capital of \$100,000, under the laws of Massachusetts. The usefulness of the apparatus and the low price (\$5) will no doubt result in its general adoption. Some of the prominent business men of the State are identified with this enterprise. In addition to its use as a lighter, the apparatus can also be used in connection with a burglar-alarm and galvanic battery.—*Boston Transcript*, December 30.

OBITUARY.

SURGEON-GENERAL JOSEPH K. BARNES.

This distinguished officer died in Washington on the 5th of April. His career as Surgeon-General marks the most brilliant chapter in the history of the United States Army Medical Department. Whatever may have been his professional attainments, for no professional work will his reputation be so greatly honored, as for the ability and sagacity he displayed and bringing together in Washington a corps of officers whose work has added unmeasured lustre to the fame of American medicine.

BOOKS AND PAMPHLETS RECEIVED.

Report on Advances in Ophthalmology, Otology and Laryngology. By Dr. Joseph A. White, Richmond, Va. Surgeon-in-Charge of the Richmond Eye, Ear and Throat Infirmary.

Reports of the President and other Officers of the Citizens' Sanitary Association, of Savannah, Ga.; also of Several Committees. 1883. Savannah, Ga: Morning News Steam Printing House. 1883.

The Dispensatory of the United States of America. By George B. Wood and Dr. Franklin Bache. Fifteenth Edition. By H. C. Wood, M.D., etc., Joseph P. Remington, Ph. G., and Samuel Sadtler, Ph. D., F.C.S. Philadelphia: J. B. Lippincott & Co. 1883. Pp. 1930.

Fifth Annual Report of the State Board of Connecticut, for the Fiscal Year Ending November 30th, 1882. Printed by Order of the Legislature. Hartford, Conn. : Press of the Case, Lockwood & Brainard Company. 1883.

The Physician Himself and what he Should Add to his Scientific Acquirements. By D. W. Cathell, M.D., Late Professor of Pathology in the College of Physicians and Surgeons of Baltimore. Third Edition. Baltimore : Cushings & Bailey, 262 W. Baltimore Street. 1883.

Tenth Annual Report of the Secretary of the State Board of Health of the State of Michigan for the Fiscal year Ending September 30th 1882. By Authority. Lansing : W. S. George & Co., State Printers and Binders. 1883.

Small-Pox and Small-Pox Hospital of New Orleans. Outline of Quarantine and Sanitary Operations of the Board of Health of the State of Louisiana, during 1882. New Orleans : E. A. Brandao & Co., Printers, 59 Camp Street. 1883.

A Manual of Auscultation and Percussion ; Embracing the Physical Diagnosis of Diseases of the Lungs and Heart, and of Thoracic Aneurism. By Austin Flint, M.D. Third Edition, Revised. Philadelphia : Henry C. Lea's Son & Company. 1883.

The Diseases of Women. A Manual for Physicians and Students. By Heinrich Fritsch, M.D. Professor of Gynecology and Obstetrics at the University of Halle. Translated by Isidor Furst. With 159 Wood Engravings. New York. William Wood & Co., 56 and 58 La Fayette Place. 1883. Pp. 355.

Communicable Diseases in Michigan during the Year ending Sept. 30, 1882, and Work of Boards of Health Restricting the Same. A Report Prepared in the Office of the Secretary of the State Board of Health. (Reprinted from the Annual Report of the Michigan State Board of Health, for the Year 1882.) By Authority. Lansing : W. S. George & Co., State Printers and Binders. 1883.

Address by J. G. Thomas, M.D., Savannah, Ga. In Defense of the National Board of Health, against Attacks in Congress, and on the Importance of Sapelo Quarantine Station as a place of Refuge for Dangerous and Infected Vessels for the South-Atlantic States. Read before the Savannah Citizens' Sanitary Association in September, 1882, and before the Georgia Historical Society in December, 1882. Savannah, Ga : Morning News Steam Printing House. 1883.

NORTH CAROLINA MEDICAL JOURNAL.

THOMAS F. WOOD, M. D., Editor.

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ORIGINAL LECTURES.

ON EPILEPTIC INSANITY.*

By Professor B. BALL, Paris, France.

GENTLEMEN :—Of all the great neuroses which are liable to exercise a baneful influence on the intelligence, epilepsy is incontestably the one which has the most intimate relations with mental alienation. In fact, not only are a great number of insane persons children of epileptics, when they are not themselves epileptic ; not only are the convulsive seizures of this disease in many cases preceded or followed by a dangerous delirium, whose dramatic explosions impose themselves violently on our attention, but there exists also in the majority of epileptics a peculiar mental state which manifests itself in the interval of the attacks, and which at many points touches on the borderland of insanity.

No more striking example can be found of the intimate relations which unite neuropathies of motility to the intellectual diseases. It is to the study of this question, full of interest but beset with difficulties well nigh insoluble, that I propose to consecrate this lesson.

*Translated by E. P. Hurd, M.D., Newburyport, Mass., from the just published "Leçons sur les Maladies Mentales."

Without entering into a methodical and complete description of epilepsy which would be out of place here, I wish to remind you that in its regular evolution this malady presents troubles of sensibility, motility and intelligence.

There is a form of epilepsy habitually designated by the term *vertigo* or *petit mal*, and which is essentially constituted by absence of consciousness,—an abrupt and transient suspension of the intellectual functions. Coming to himself, the patient has no knowledge of what has passed ; it is a trouble purely intellectual. But when it is a case of *grand mal*, each attack presents at least three stages ; first of all an aura, that is to say, a trouble of sensibility, which may assume the most diverse forms and sometimes be completely wanting ; then come the convulsive attacks to which succeeds a period, more or less long, of stupefaction. Here then the series is complete ; we have troubles of sensibility first, then troubles of motility and, finally troubles of intelligence. But here is the important point ; all these phenomena may be substituted, the one for the other, it is then necessary to study them together.

Let us look first at the mental state of epileptics who are not insane. They are quite often in a condition perfectly normal, in appearance at least ; but in the great majority of cases we note one or the other of two opposite states ; extreme irritability or exaggerated good nature.

The irascible epileptic is a being absolutely insupportable. He is suspicious, quarrelsome, violent. Not only he maltreats others, but he complains without cessation, which makes him insufferably tiresome. In short, he is often a dipsomaniac, or given to venereal excesses. He is neuropathic, even from the point of view of character, and apart from all convulsive attacks.

In contrast, there is a class of epileptics altogether different. They are good natured, polite, obsequious, to a fatiguing degree. In both classes you notice a play of humor, and a versatility of ideas which strike the least attentive observer.

Generally their intelligence is enfeebled and depressed. This enfeeblement which effects especially the memory, is the more marked the older the disease, but there are patients where the contrary is observed ; they manifest preternatural mental activity. They are men of talent ; sometimes men of genius. So Jean Tail in his treatise on epilepsy, pretends that the majority of epileptics are

men of extraordinary mental development. He was not altogether wrong, but he had seen but one side of the question.

The mental condition then, is one of irregularity, but in many subjects at the approach of the convulsive paroxysms, the peculiarities above alluded to are by far more apparent.

We have said that the series of physical phenomena commences by an aura. It is a strange sensation which the patients habitually compare to a cold breeze, which mounts upward from some point of the periphery to the centre. At other times the aura is in the form of formications, tingling, a burning feeling, visceral sensations, nausea for example. In fine the aura is often accompanied or replaced by hallucinations. Those of sight are the most common. One patient will see at the moment of attack a cog wheel on which sits a figure making horrible grimaces. Another will see a smiling landscape, at the moment when the attack commences. In certain subjects the hearing is compromised; he hears voices, strange noises; others are warned of an attack by strange odors. I know an Englishman who has long been epileptic, whose attacks are always ushered in by a sickening smell, which the patient can compare to nothing. It is an odor *sui generis*, it is veritably the *odor* of epilepsy.

There are subjects in whom these sensorial troubles are replaced by locomotor troubles. Our patient, at the commencement of the attack will run rapidly for thirty or forty paces, then he falls to the ground, and goes into convulsions. Another will turn round and round for several seconds, before the convulsive crisis begins. But these phenomena, so curious and so diverse may all be replaced by intellectual phenomena. In other terms, if there are physical prodromata, there are also psychical prodromata.

Certain patients become gloomy, irritable, quarrelsome a short time before the convulsive explosion. It is a veritable intellectual aura. Others, on the contrary, a few moments before the attack, are gay, loquacious, blustering, and self-sufficient. Others are depressed, prostrated, express themselves with difficulty, say that they cannot command their thoughts, manifest disquietude, and an evident loss of memory. There are in fine other subjects in whom veritable intellectual troubles develop before the attack. They have fixed ideas, delirious conceptions; they are pursued by gloomy recollections which they cannot drive away.

M. Billod relates a case where the convulsive crises were preceded for three days by an attack of acute mania.

Sometimes the subject, before falling in convulsions, is furiously agitated ; he cries, he shouts, he pronounces persistently a word, a name, a phrase. A woman whom I saw in the service of Moreau, of Tours, became epileptic consequent on an intense emotion ; a citizen of her town whose name was Jean Louis Philippe, had murdered his wife. Our patient saw the corpse, the fright which she experienced immediately determined an epileptic fit, and this was the point of departure of her malady. Whenever afterward an attack was about to declare itself, she would cry out with an accent of horror, "Jean Louis Philippe ! Jean Louis Philippe ! Jean Louis Philippe ! He has killed his wife, THE VILLAIN !" This last word was pronounced with more expression than the rest. Then the convulsions set in.

But if the delirium may manifest itself before the attack, it is especially after the attack that we see madness declare itself. It is immediately following a convulsive paroxysm that the epileptic presents the most marked intellectual disturbances. The most ordinary phenomenon is pronounced hebetude, with cerebral torpor, loss of memory and confusion of ideas. This state sometime lasts a day or two. Oftener it disappears after a few hours. These rudimentary troubles may be replaced by a state of delirium which is almost always a delirium of action. The patient at this period perpetrates actions which are senseless and are often ridiculous. Marcé relates the case of a woman who, immediately subsequent to a fit, would stitch together her bed clothes in bundles, all the time repeating the word—coche.

It is more especially at this moment that one sees burst forth the *furor epilepticus*, which in its worst features may last but a few instants, but during this short space of time, suicide, murder or incendiarism may be committed.

We cite as an example, the case reported by Jules Fabret, in the *Archives Gen. de Medecine* for 1861.

"François L., shoemaker, was for many years subject to epileptic fits. These first came on after a fall on the ice. The attacks, which at first were followed by but slight alteration of the reason, became more serious, and were accompanied by furious mania.

"He had served in the fifth regiment of light infantry, from 1838 to 1841, and when he left the army, he resumed his occupation. When he had his attacks during this period, he would seize his hammer, his knife or whatever implement came to hand, and brandish it with a menacing air, so as to provoke the raillery of his comrades.

“When he was through with his military service, he returned home and decided to marry. The ceremony was fixed for the 26th October, 1841. The 24th an intense headache came on, and seemed to him to betoken an impending attack. He called a physician who had formerly treated him for this disease, and demanded to be bled, an operation which had always given him relief. The physician refused, alleging that this remedy ought not to be too often employed. The 26th, some hours before the wedding, he was bled by another physician but without any diminution of his pain. During the marriage ceremony, François was dejected, taciturn; he said nothing but the one word *yes*. In quitting the church he was seized with a most atrocious pain in the head, and when he arrived at the house of his father-in-law he was obliged to take his bed. The bed chamber was adjoining the dining room where the wedding feast was being prepared. There he was seized with an attack of epileptic madness, and while the persons who were with him were hunting for cords to tie him, he precipitated himself, naked, into the dining room, with a shovel of which he obtained possession, pursued a woman who fled before him, threw her down and inflicted heavy blows on her head. His father-in-law interposed, when he flew at him and drove him from the house. He cast himself on the ground before the door biting the threshold with his teeth; then he rose with a shoe knife in his hand, opened the door with force, crying out that he would kill them. The first person he met was his father-in-law, whom he instantly killed. *This attack lasted three days.* On the 28th inst. his reason returned, but he remembered only the event of his marriage, and nothing of that which came after. He supposed that he had slept all that time. He was at once removed to the asylum at Clermont, where he still remains. Under these circumstances the guardian of the bride applied to the court for a declaration of nullification of the marriage, alleging in support of this petition that the defendant was not in a sound mind at the moment of the ceremony, and consequently could not legally give his consent. The court granted the petition and declared the marriage null and void.”

I have related this case because it offers a true type of the *furor epilepticus*. It, moreover, gives a good example of the absolute loss of memory which is consecutive to the attack. This phenomenon is not constant in its completeness; there are persons who preserve a confused memory of what has taken place, and Tuke cites a striking

example. A patient who had grossly insulted his medical attendant during an attack of epileptic mania, demanded pardon the next day for what he had done alleging as an excuse the disturbance of the intellectual functions caused by the disease.

I have said that the delirium may burst forth before or after the epileptic attack. Bellod, cited by Fabret, relates an observation in which the epileptic crisis was always preceded by a state of melancholia, and followed by a state of mania.

An ecclesiastic fifty-four years of age, was epileptic for about twenty years. Every month occurred a period marked by two or three complete epileptic seizures. Each of these periods was preceded for eight or ten days, by a melancholic delirium, characterized by ideas of persecution, and by hallucinations of hearing, which caused him to hear the most shocking blasphemies. But after the convulsive paroxysm, and several days of hebetude which followed, he entered upon a phase of *bien être* and satisfaction inexpressible; he spoke incessantly of his restoration, the happy tidings of which he deemed it important to announce to his bishop and to his family; he saw the intensity of his hallucinations of hearing diminish, and was enabled to devote himself to his habitual religious exercises. This period of *bien être* trouble lasts about a fortnight; then come a crisis of melancholia, finally another convulsive seizure.

We will now study the characters of epileptic delirium proper, without concerning ourselves with its relations to the convulsive state. With Fabret we recognize two principal forms of epileptic delirium; Fabret applies to them the names *petit mal* and *grand mal intellectuel*.

The *petit mal* intellectual is characterized by great confusion of ideas, by a sort of hebetude, and a predominance of bad instincts, the whole traversed from time to time by irresistible impulses. Often these patients have an obscure consciousness of their condition, without being, for all that, really more lucid. They say that a bad spirit dominates them, that they are not themselves, they experience a great difficulty in collecting their thoughts and fixing their attention; they are victims to a profound malaise, and are absolutely incapable of resisting their instincts.

Pinel relates the case of a young girl who from the time she was four years old had had attacks of epilepsy. At the age of seventeen she entered the service of a peasant. She was a sorry

acquisition to her master, for she set fire to his house twice, but the second time she gave the alarm herself, then tried to hang herself. Interrogated as to her motives, she could only say that she had none "I had something in me that incessantly prompted me to set fire, then to hang myself."

In certain subjects there is utter loss of consciousness. The patient comes to himself, as if awakened from sleep, and is astounded at his actions. Legrand du Saulle has related a curious case of kleptomania; it was of a man, who, three or four times a year felt a strange sensation in the stomach, which soon transformed itself into a vapor which mounted up to his head. At this moment he lost his mind, committed numerous thefts, then came to himself in prison; he was thunderstruck at seeing issue from his pockets, when the officers searched them, a quantity of objects stolen, concerning whose source he had no idea whatever.

Other subjects are seized with an irresistible propensity to perform journeys, and make, without knowing why, distant and prolonged excursions.

In some epileptics we observe a sort of delirium of persecution; they say that they are very unhappy; they have enemies everywhere; they are irritable and spiteful; finally they have sudden impulses to commit murder, incendiarism or suicide. When once they yield to these impulses, they act with determination, they strike with reiterated blows, and make many victims. This, according to Fabret, is a characteristic trait, which has a real importance from the standpoint of legal medicine.

When once the crime has been perpetrated, the patient often experiences a reaction; the state of intellectual oppression in which he existed just before, vanishes all at once, and he comes to sanity; but if this is a great relief to him, he is stupefied with horror at the crime which he has committed.

At other times after the deed of violence, the mental oppression continues, and the patient runs here and there without knowing what he is about. This form of delirium affects especially young subjects scarcely twenty years of age.

The *grand mal intellectual*, or *furor epilepticus*, resembles acute mania, but it is characterized especially by confused ideas which succeed each other with extreme rapidity, and by a violence extraordinary. The patient often abandons himself to incessant loquacity, which accompanies his act of violence.

One of the principal characteristics of this kind of mania is its sudden invasion, which comes on unexpectedly and without warning. Sometimes, however, the patient manifests signs of irritability before hand.

A second characteristic and still more important, is the absolute similitude of all the attacks in the same individual, a similitude which applies not only to the *ensemble*, but to the minutest details of the crisis. The patient perceives the same hallucinations, is dominated by the same ideas, utters the same words, often queer and silly, and gives himself up to the same acts of violence, so that each attack is the exact copy of the previous one.

The third characteristic is the extreme violence of the attack. The fury of epileptics makes them the most dangerous of patients, and that, more especially, when their apparent tranquility has disarmed the attention of all around them. Who does not know the sad case of Godefroy, smitten to the heart by a tranquil epileptic with whom he was holding peaceful conversation ?

A fourth characteristic is the conversation of a certain logical method in ideation. These patients are less incoherent than maniacs generally, and can sometimes respond with correctness to questions asked.

The duration of the attacks of *grand mal intellectual* is generally brief; it does not often exceed several days; the cessation is abrupt; the patient awakens as from a painful dream, and in a few hours resumes his usual health; almost always he has retained no consciousness of what has passed.

The two forms above described have intimate relations with each other, they may occur alternately and succeed each other in the same patient, precisely like epileptic vertigo and the convulsive seizures.

But what it is important to note, is that epileptic delirium sometimes comes on of its own accord after a series of attacks which manifest themselves after a long suspension of the malady. It is like an electric discharge succeeding a prolonged accumulation of that fluid.

It remains to speak of epileptic madness apart from the attacks. I have more especially considered the delirium in its relations with the convulsive crises, but you should know that it comes on sometimes a long time after every manifestation of this kind, and when the patient seems to be cured. There is especially a form of *lurval* epilepsy which claims our attention from a medico-legal standpoint ;

the delirium of impulse which bursts out sometimes long before any attack of epilepsy. We cite as example the case of Thouviot, the celebrated assassin, concerning whom Prof. Lesegne has published a remarkable study.

This young man urged on by an irresistible homicidal impulse, wandered about the streets of Paris for several days seeking an opportunity to kill a woman. He ended by entering a restaurant in the Rue Cujis, where he found a young girl picking over some beans. Seizing a large cheese knife, he plunged it into her heart. After a medico-legal examination, he was pronounced insane, and transferred to the Bicêtre for security, where we had an opportunity to see him. He was then perfectly tranquil, and demanded persistently to be set at liberty; but during the course of his confinement he had two epileptic fits, the first that he had ever had, and which shed important light on the causes of the motiveless murder which he had committed. He finished his career by hanging himself from the iron bars of his prison window, after having for a long time vainly solicited his liberty.

But what is of still more importance from a theoretical and practical standpoint, is that the delirium may undergo transformation into genuine epilepsy. The convulsive crises may take the place of the intellectual troubles. Conversely, epilepsy may be transformed into delirium. Esquirol relates a case in point. Instead of the attacks of epilepsy the patient was impelled at certain times by irresistible impulses to murder. The moment he felt the maniacal attack coming on he demanded to be chained.

Apart from mental alienation, epileptics have often a vicious character. They have, it may be, a marked *penchant* for alcoholism, or venereal excesses. Dipsomania is met with among them, and more than one epileptic has been noted for brutality in his family, flying into paroxysms of rage and abusing his wife and children for the most trivial causes.

For these reasons, when a crime has been committed by an epileptic who has never offered any symptoms of mental alienation, the medico-legal expert may, with reason, demand if the criminal is responsible. In fact, one is always justified in supposing that the criminal act was the first manifestation of a developing lunacy, or the result of that impulsive, brutal, badly equilibrated character, which, in an epileptic, diminishes unquestionably the moral freedom.

The prognosis of epilepsy, from a mental point of view, is incontestibly most gloomy. Whether mentally alienated or not, these patients are marching more or less rapidly toward dementia ; they begin by losing their memory, then their intellectual grasp is weakened ; they fall into the most complete hebetude and never rally.

There are, happily, exceptions to this rule. There are epileptics who preserve during a long life an intelligence sometimes extraordinarily developed. History furnishes numerous examples, and every day practice gives facts in support of this statement. But this is never the case except with subjects whose attacks are wide apart and infrequent, and who have become epileptic after the age of puberty. When the malady dates from infancy, the intellectual enfeeblement is well nigh inevitable.

The treatment of the intellectual troubles of epileptics cannot be separated from that of epilepsy in general. It is, nevertheless, worthy of remark that the prolonged use of the bromides, which gives such excellent results from the point of view of the convulsive attacks, may bring about in the long run, a sensible impairment of the mental faculties. I prefer very much the mixed treatment, which consists in the conjoined administration of several of the popular and time honored remedies for epilepsy. I generally associate oxide of zinc and belladonna, with the alkaline bromides, and the results of this treatment appear to me preferable to those which are obtained by the employ of a single medicament, especially from the point of view of that of the intelligence of that patient. In every case, it is certain that in suppressing the convulsive seizures, or diminishing their frequency, we relieve in a notable manner the troubles of the mind.

BELLEVUE IS RIGHT ON THE CODE.—All honor to Bellevue College. She gives no uncertain sound, but declares that the standard of medical ethics recognized by that institution is embodied in the Code of Ethics of the American Medical Association. All honor to Bellevue ! We know that the many warm friends of that College will rejoice to know, that she has not precipitately deserted the position she once so proudly held, and that Southern preceptors may, without hesitation, speak of this College with favor.

SELECTED PAPERS.

LECTURE ON THE COMPARATIVE PHYSIOLOGY OF MENSTRUATION.

By ALFRED WILTSHIRE, M.D., F.R.C.P., Lond.

GENTLEMEN :—We may now examine the evidence furnished by observation upon the females of the lower animals at their periods of heat. It will be apparent that there is singular accord in the statements of competent observers upon the phenomena as they present themselves in the various animals ; and that, in all the creatures subjected to inquiry, some more or less conspicuous flux or exudation occurs; the majority exhibiting manifestations partaking in varying degrees of a sanguineous character.

In observing domesticated animals, and still more those in a state of captivity, the same allowances for individual variations should be made as would be made in regard of women ; in whom we find laborious life and hard fare to some extent diminish the flow ; while ease, luxury, and plenty (not excess) promote it. Again, racial peculiarities, with the lower animals as with the human species, may unquestionably affect the character of the flow.

Very slight changes in normal conditions affect the capacity for reproduction in all animals ; hence, many creatures fail to breed in captivity, while, on the other hand, domesticable creatures have augmented powers. Mr. Darwin's statements to this effect are numerous and weighty. In *Animals and Plants under Domestication*, vol. ii, pp. 143-4, he says : " It would appear that any change in the habits of life, whatever these habits may be, if great enough, tends to affect in an inexplicable manner the powers of reproduction. The result depends more on the constitution of the species than on the nature of the change for certain whole groups are affected more than others ; but exceptions always occur, for some species in the most fertile groups refuse to breed, and some in the most sterile groups breed freely. * * * Changed conditions of life have an especial power of acting injurious on the reproductive system. The whole case is quite peculiar, for these organs, though not diseased, are thus rendered incapable of performing their proper functions, or perform them imperfectly." *Ibid.*, p. 256 : " We know that certain groups of organic beings, but with exceptions in each group, have their

reproductive systems much more easily affected by changed conditions than other groups ; for instance, carnivorous birds more readily than pigeons ; and this fact harmonizes with the apparently capricious manner and degree in which various groups of animals and plants vary under domestication."

Analogous susceptibility is displayed by the human female in the disturbance, mostly arrest, of menstruation that so often attends change of residence. I have met with innumerable instances of this. Nothing is more common for maid-servants coming from the country to London to have amenorrhœa for some months. Among ladies, many instances of disorder have come under my notice from foreign travel; but the effects are not always injurious. Making due allowances, then, we may now review the evidence at our disposal.

Mr. Simpson's statements, based upon observations made on his own cattle, are as explicit as they are reliable. He states that his heifers usually arrive at puberty at from six to nine months, and sometimes even earlier; and that, after the establishment of the symptoms of heat, or "bulling," the rut recurs, when the bull is not allowed access, with strict regularity every twenty-one days, or three weeks. Œstro-menstruation is shown by swelling of the vulva, which at first weeps an odorous mucus, but soon this becomes quite red from the presence of blood ; and when that stage is attained, the heat rapidly subsides, intercourse being then refused. Mr. West, Mr. Simpson's excellent veterinary surgeon, emphatically confirms these observations, and adduces his very large acquaintance with analogous phenomena, personally observed, in other animals, as the mare, female ass, bitch, cat, etc., as well as in cows.

Mr. West made a statement to me which is amply corroborated by remarks of Mr. Darwin's, namely; that in the rougher Welsh and Highland cattle, which lead harder lives, maturity, or the epoch of puberty, arrives much later than in Alderneys or shorthorns ; but he adds that a flux of sanguineous character equally occurs in the females of those breeds at the time of the rut. I am indebted to Mr. West for information respecting a remarkable case of "impervious vagina in a heifer," which occurred in his practice, and which illustrates the occurrence of sanguineous menstruation in the heifer. Mr. West was called to see a heifer supposed to be in labor, and unable to calve. On examination he found the vagina to end in an impervious canal three inches from the vulva. Thinking the fœtus

must be dead and abortion prevented by the state of the vagina, Mr. West advised that nothing should be done, hoping the pains might subside. They continued, however, and the heifer lost flesh. Four months afterwards, Mr. West determined to cut through the obstruction. This he did, but having passed it, he found the os uteri contracted; accordingly, into this he inserted a whalebone sound, and dilated it a little, when a reddish-brown fluid began to escape. About two quarts altogether came away, but no signs of a foetus. The beast recovered. Mr. West concludes with the remark that the fluid "should have come away as a periodic discharge, but was prevented by the impervious state of the vagina, which must have also rendered impregnation impossible."

Mr. West was also so good as to refer me to a similar case published by Mr. Macgillivray, in vol. iii of the *Veterinary Journal*, p. 443. In this case there was an impervious vagina in a heifer, which had never been put to the bull. The creature had severe bearing-down pains, and was thought to have obstruction of the bowels. A passage was forced into the generative canal, and dark brown offensive fluid escaped. Mr. Macgillivray regarded the case as proving "the existence of a menstrual discharge in the brute female, analogous to that in the human female." He considered that the "æstral" products had never found vent from the uterus. These views were combated by another veterinary surgeon, Mr. Gerrard, but his arguments, though plausibly advanced, were quite inconclusive. Mr. Gerrard points out that adhesion of the vagina sometimes arises from injury done in copulation; but admitting this as a possible though rare occurrence, it does not apply in Mr. Macgillivray's case. Nor is Mr. Gerrard's argument on the "sero-sanguineous" nature of the fluid valid; for, as will be shown, the sanguineous character of the fluid diminishes as we descend in the organic scale; even in women the catamenial discharge is sometimes abundantly mucous. Mr. Macgillivray replies to his opponent's strictures in the same volume (vol. iv), and conclusively shows that his case was one of impervious vagina. He goes on to express the very decided conviction that the lower animals do certainly have an "æstral" discharge resembling the catamenia of woman, though it is not so invariable, copious, or well defined as in woman. He then gives instances of excessive flow in the cow and mare, and concludes by saying: "The discharge of a more or less quantity of a blood-like fluid in heifers and cows

during the cessation of 'heat,' is so common, and so well-known to all herdsmen, as scarcely to require any notice here."

Mr. Gerrard, admitting that the "œstral" discharge is frequently more or less tinged with blood in the lower animals, considers that a sanguineous flow is the exception and not the rule; but it is obvious that he is opposed to authorities like Fleming and Saint Cyr, as well as to the observation of most competent inquirers. Probably, when it is understood that, in accordance with the law of evolution, the discharge of the lower females is normally less sanguineous than in woman, these discrepancies between undoubtedly honest observers will disappear.

Laycock (*Nervous Diseases of Women*, p. 42) says: "The menstrual period has been considered analogous to the heat of lower animal by numerous writers. Reaumur and others, down to Cruikshank and Blundell, have described the state of the organs of generation in brute females during this period; they have been found fuller than usual of blood, the fallopian tubes in a state of excitement, or applied to the ovary, the latter enlarged and studded with developed Graafian vesicles, and a serous blood-colored fluid discharged from the vagina. There are various considerations which serve to support this opinion."

"The following may be considered as the true state of the case respecting menstruation. Since the uterus itself is not an essential organ of generation, but merely superadded and since the influence of the ovaria and testes over all the other processes and organs connected with generations, including the existence of the uterus and its development during gestation, has been demonstrated, there appears not the slightest reason for withdrawing the phenomena of menstruation from their agency. It is in the ovaria, then, that we have to look for the causes of this process. There is every reason to believe that Graafian vesicles are coming forward at intervals during the whole period in which the reproductive organs are active; that these vesicles enlarge and burst in succession, and shed the contained ovula, whether sexual connection takes place or not; and that, from recent researches, these changes in them take place at each menstrual nisis. If we remember that, during the period of heat in the lower mammals, as the ewe and the sow, and of spawning and egg-laying in birds, fishes, reptiles, insects—indeed, of every class of oviparous animals—these ovula become developed and are shed, whether they

be fructified or not, recurring at the same time to previous statements, we cannot help coming to the conclusion that the period of menstruation is precisely analogous to the period of heat ; that there is, in fact, an excited state of the ovaria at each period when ovula are shed ; and that the capability of performing this periodic function distinguishes the ovaria of the woman from those of the impubescent girl and virago. If, at this period, an ovulum be vivified by the male semen, conception takes place ; and this hypothesis at once explains the doctrine that women more readily conceive at the menstrual period, maintained by Hippocrates, Galen, and their numerous copyists among the ancients, by Dr. Montgomery and others in later times, and generally believed by females themselves. When conception has taken place, a new action is set up in the ovaria, which may be considered as a permanent stimulus to the whole of the generative organs ; and, although the usual *nisus* may and does occur during pregnancy, its effects are rendered less obvious from its permanency.* If, on the other hand, the discharged ovulum or ovula be impregnated, the same process is repeated at the next menstrual period, and so continues until age, disease or conception interferes with the ovarian system. But we shall find that this periodic movement is not limited to the ovaria, but that it is an affection of the general system in which the ovaria partake ; and that it is through these the secondary system in connection with them is influenced, and all the attendant phenomena (those of menstruation) excited."

"Recurring to our previous statements, it appears that in many animals the development of the testes and ovaria, and the shedding of the ovula and spermatie fluid, occur at definite seasons of the year, and, for the most part, in spring and autumn. The heat also of these animals, in which the genitals are in continuous activity, occurs at fixed periods, and these must be compared with the periodic movement of the human female. Again, the period of gestation in woman is a multiple of the menstrual period, and it will be useful to inquire into the relations of the periods of utero-gestation in animals generally to that of woman."

"Are the lower animals influenced by a period *nisus*, weekly or monthly ? This question I shall attempt to answer in the affirmative,

*Fleming (*Vet. Obstetrics*, p. 52) says: "Franck has convinced himself by *post mortem* examination of mares, of the possibility of ova being thrown off from the ovary during pregnancy."

as well as my limited space will allow. It has already been remarked, that the change from foetal to uterine [? extra-uterine] life is a phase in development which in man occurs at the end of the tenth menstrual period of the female. This is correct as regards the general fact; but it must be added that slight labor pains occur at every menstrual period, but most particularly in the third, fifth and seventh months of gestation; a foetus of the last-mentioned age being able to maintain an independent existence. The period of incubation of the egg is strictly analogous to the periods of utero-gestation in mammalia; and the same remark is applicable to that of the ova of fishes, reptiles, and insects, with due limitations. For example, in insects, the egg, larva, and chrysalis states correspond to the whole period between conception and puberty in mammalia. Mr. Kirby remarks that winged insects, many brachiopod crustacea, and the batrachian reptiles, in leaving the egg, only quit their first integument, answering to the chorion or external envelope of the human foetus; they, therefore, still continue in the foetal state." Laycock also quotes from the *Zoonomia* of the elder Darwin (Erasmus) that, "in mares and bitches, if the venereal orgasm be disappointed of its object, it recurs at monthly periods." (P. 60.)

Laycock adds many illustrations of the periodical recurrence of heat at brief intervals in the lower animals (pp. 60-61); and mentions an instance of a cow which, while in calf, was in heat every three weeks, and calved three weeks after the last time of heat. Kolbe and Buffon are quoted with reference to menstruation in monkeys, the latter asserting that the following monkeys menstruate (besides the ourang-outang): "the Barbary ape, the ribbed-nosed baboon, the lion-tailed baboon, the pig-tailed baboon, the hare-lip monkey, the Malbrouck (*simia sinica*), the white eyelid, the varied, the green, and the moustache monkey."

Laycock states that the rutting of the males is somewhat analogous to the heat of the females in respect of its periodicity, and remarks that "the ring-pigeon lay eggs for fourteen days after pairing, sits other fourteen days, and in fourteen more the young ones leave the nest. The goldfinch completes its nest in three days; it is left unoccupied four days, when the first egg is laid. Reviewing the whole of the preceding facts, it appears a legitimate deduction, that, in animals, changes occur in every three and a half, seven, fourteen, twenty-one, twenty-eight days, or

at some definite number of weeks." In most of Laycock's statements I concur.

The valuable contributions of Pouchet to the subject of menstruation lend material support to the view that the function pervades the mammalian series, and is subordinate to the law of evolution already propounded.

He remarks (*Théorie Positive de l'Ovulation Spontanée*, p. 201) that the commotion excited by the maturation of ovules, not only excites the genital apparatus, but reacts upon the whole individual. "Sometimes it is manifested but once during life; the animal—suddenly exhausted by this concentration of all its vital forces—dies soon after having produced its ova; this is observed in the majority of insects. The beings of more robust organization resist this act, and we see that during the middle period of their life they reproduce annually. The majority of fish, reptiles, amphibia; birds and mammalia are in this case. * * * There exists in these creatures a species of periodic growth, as G. Saint-Hilaire has said, during which the blood flows constantly towards the ovaries and excites an expansive movement." He then points out the heightening power of domestication, but insists that, even when the periods are rendered more frequent, they still show intermittence, which in woman is monthly. In the lower vertebrata, the sexual disturbance is not so conspicuous as in higher creatures. In some mammalia the genital orifices and adjacent parts show conspicuous excitement, often accompanied by sanguineous emissions. The names of Aristotle, Linnæus, Buffon, Cuvier, Blumenbach, Saint-Hilaire, and others are quoted in support."

Again: "If observation shows that ova are incontestably produced at fixed epochs in all invertebrate and vertebrate animals, since in them new generations appear constantly after regular and invariable periods if, I say, that is admitted for all the zoölogical series, and it cannot even be contested as regards mammalia in a wild state, it becomes evident that the aberration observable in these latter that lived in our habitations, comes only from the new condition in which they are found; for attentive observation shows us that in them equally there are phases of excitation, and that it is during these that ovules are produced and that fecundation is possible. The condition of the human species enters entirely into this category, and if the periods when reproduction is possible are

very frequent in women, that belongs manifestly to the amenities of social life."

"In animals the flow of blood is ordinarily less abundant and the period of excitement returns at longer intervals. Notwithstanding, there exist in the domain of mammology species which are nearly as much regular as certain women, and in which the flow appears almost as frequently." Dugès and Jourdan also remarked these analogies.

Isidore Geoffroy Saint-Hilaire says (Breschet, *Recherches Anatomiques et Physiologiques sur la Gestation des Quadrumanes*, Paris, 1845, p. 4): "In monkeys the flow coincides in all the females with a swelling, more or less manifest, of the vulva and enviroining parts. This swelling, moderate in the females of the apes, is, on the contrary, very considerable in the females of many species of macacus, and in all the species of cynocephalus. In all the latter it extends not only to the anus, but beyond, and it is so marked that all the orifice seems as if environed by a large collar. The skin at the same becomes deeply red. In the mandrill, G. Cuvier compares, for volume, to a child's head, the unequal red and inflamed looking protuberance which then forms around the anus. The same phenomena, though a little less pronounced, occur in the females of macacus; and even it often happens in these, for example, and in the females of rhesus and maimons, that the swelling extends to the inferior part of the tail, near the base." Again, Saint-Hilaire (*Histoire Naturelle des Mammifères*, Paris, 1824) says: "The females of apes, macacus, magots, cynocephalus, and probably of all other kinds of the first tribe, are subject to a flow periodically appearing from month to month. The matters emitted by the vulva are blood and mucosities, sometimes sanguinolent, sometimes white; the flow continues during six or eight days, and sometimes more. G. Cuvier fixed even at fifteen days the duration of the flow in a female mandrill which he made the subject of repeated observations."

Cuvier observed menstruation in carnivora, among others, in the genets; and Lesson and Garnot recognized it in the flying-fox (pteropus), which Saint-Hilaire says is periodical. Haller quotes many authors who thought monkeys, cows, deer and bitches offered evident traces of menstruation. ♦ Numann and Rainard made similar observations, while Pouchet had himself observed it in bitches, sows, cats, rabbits and guinea-pigs, especially in the first. (Mr.

Bartlett, the able superintendent of the Zoölogical Garden, tells me that the discharge may be abundant in the bitch, and that the heat is sometimes long sustained in the carnivora). The wild pigeon produces only once or twice a year, while the varieties which it has given us through care, breed ten times a year, as Aristotle, Buffon, and Blumenbach have observed. Kulemann says sheep come to heat every fortnight sows every fifteen to eighteen days. Kahleis and Numann, that cows come every month or three weeks; Greve, that mares come monthly; and Cuvier, that buffaloes, zebras, and monkeys, come also monthly. Courty also recognized the graduated relation of menstruation in the zoölogical series.

From his observations on sows, Pouchet concludes that the menstrual phenomena ordinarily precede the rupture of the Graafian follicles. (P. 262:) "During menstruation the vagina of the sow offers a rosy tint, and the mucous fluid which it contains is slightly abundant. Microscopical examination showed me that the latter is composed of fragments of epithelium, cylindrical and pavement; mucus-globules, and blood-corpuscles in small number. * * The womb, before its bifurcation, is reddened, and its capillaries are highly injected with blood. * * * Their mucosa is considerably thickened and spongy, and of a deep red, and, in certain parts, the abundance of blood wherewith it is engorged gives it even a violet coloration. * * * Thus, then, menstruation in the sow is a demonstrated fact. As in the human species, there is an emission of blood; but if this is not abundant, it is because this fluid is found in great part poured out in the immense extent of the internal generative apparatus." During the intermenstrual period, the vaginal and uterine mucous membranes are pale. Pouchet says that the appearances are absolutely similar in the rabbit, but that there is even more blood; and his observations upon bitches, cats, and other mammalia were equally confirmatory.

At p. 266, Pouchet says:—"In a work on the physical and moral system of woman, (Roussel *Système Physique et Moral de la Femme*, Paris, 1813, also edited by Cerise, 1860, Paris) pretends that menstruation is due to civilization. We have expressed nearly the same opinion; only we think that the state has not determined the essence of the phenomenon, but that it has only considerably augmented its frequency in rendering it nearly mensual."

Auber also attributes the existence of the function to social

advancement (Raciborski, p. 18). "Velpeau (*Tr. Comp. de l'Art des Accouch.*, t. 1, p. 126) says that, in Lapland and Greenland, women, are not more often regular than every three months; and Gardien (*Tr. d'Accouch, et de Mal. des Femmes*, t. 1, p. 233) pretends that in women in Polar countries the menstrual flow takes place only twice or thrice a year." Pouchet, therefore, ably argues the physiological identity of the function in all the mammalian series, including woman; he says (p. 227):—"Menstruation consists in the appearance of a periodic and temporary excitement in the genital apparatus of woman. This function is declared by an afflux of blood in all the organs that share in it, and by the flow externally of a certain quantity of this fluid. Then it is essentially and ordinarily characterized by a swelling and maturation of one of the Graafian vesicles, and by the emission of the ovule which this latter contains."

Trousseau (*Clin. Med.*, p. 598), speaking of signs exhibited by the lower animals while breeding says:—"Need I add that, during the period of rut in most female animals, the congestion of the genitals manifests itself by a flow of blood, and by an increase in the secretion of the glands, which are annexed to those organs?" Both Tarnier and Chantrenil (*Tr. d'Accouch.*), and Cazin, in his memoir on "Varices in Pregnancy and Parturition" (*Arch. de Zool.* 1880), quote Raimond as stating that "In the females of animals the vagina is colored red at the epoch of heat; it takes a violet or brownish tinge during pregnancy, and the mucous membrane seems to thicken." Cazeaux says:—"In the rabbit it is tumefaction and almost varicose injection of the vessels of the vulva. To this coloring and tumefaction is added, in the bitch, an odorous secretion, which allures the males and puts them upon the track of the females. Finally, in monkeys a more or less abundant hæmorrhage occurs, which in the case of the macaques and the cynocephalæ, coincides with so monstrous a swelling of the vulva, that, in certain cases, the surrounding parts are infiltrated, as though inflamed in consequence of the sting of bees."

Raciborski (*Traité de la Menstruation*, p. 43) remarks on the resemblance between the rut and menstruation in the matter of periodicity, and states that sows have symptoms every fortnight to eighteen days, heifers twenty-one days, sheep every fortnight. Quoting from a friend having choice cattle, he says that the higher breeds require the male more often than inferior breeds; on which

he exclaims, "*En voilà un singulier privilège de l'aristocratie dans la race bovine!*"

Generally, in most animals, there is swelling of the external genitals, and a discharge which is often sanguinolent, especially in the heifer, bitch, sow, and rabbit; while in monkeys, particularly in the great species, it often takes the proportion of a hæmorrhage.—*British Medical Journal.*

QUINIMUM SALTS.

The quinimum salts found in the general market, excepting the sulphate, are very much less in demand than this great staple salt, probably because it appeared earliest in the field and so became the dominant form. Had the chloride, instead of the sulphate, been first presented its introduction would have followed as a matter of course. It is, indeed, to be regretted that this was not the case, since the chloride has more specially valuable qualities than are possessed by any other quinic salt. Containing a greater percentage of quinine it is at the same time more soluble in either alcohol or water than any other normal quinimum salt; and, although far more soluble than the normal sulphate it is much less bitter and less persistently bitter than this. Another advantage is that owing to its greater solubility all other less soluble salts of quinine can be prepared from it by double decomposition. Whilst being the staple form it could also be the cheapest salt of the market, and hence all other varieties prepared from it would be correspondingly less costly than now.

For preparing the various quinimum salts from the sulphate two methods are in use. One consists in precipitating the base from the acid sulphate by means of caustic alkali, and dissolving it in the acid of which the salt is desired. By the other method either the normal or the acid sulphate is decomposed by the barium salt of the acid whose quinimum compound is to be obtained. In certain cases other processes or modifications of the foregoing may be employed with advantage.

The first general method is rarely desirable, and the use of the barium salts although frequently directed is not often resorted to,

the corresponding calcium salt with alcohol being employed in most cases with superior effect. By one method strong alcohol is employed and the entire precipitation of the by-product is aimed at. In the second, only sufficient alcohol is added after the completion of the reaction to effect the solution of the generated quinium salt in the least volume of aqueous menstruum.

Of several processes for producing quinium chloride the best is afforded by taking advantage of its almost total insolubility in a saturated solution of sodium chloride. When any convenient amount of quinium sulphate is mixed with a hot filtered saturated solution of sodium chloride, the quinium chloride is precipitated as a crystalline magma which rapidly agglutinates, and, on cooling, forms a compact friable mass. The liquid is poured away from the residue, which is washed from the sodium sulphate generated by heating several more times with sodium chloride solution. The quinium chloride may be crystallized from hot water in the usual manner.

Quinium hypophosphite is usually made by dissolving the free base in hypophosphorous acid and crystallizing. The best result is obtained by dissolving 170 parts of calcium hypophosphite in 15,000 parts of water heating the solution and adding 872 parts of quinium sulphate, filtering after the calcium sulphate has subsided and setting the solution aside to crystallize.

The union of tannin with quinine, the so-called tannate, in view of its medicinal inferiority and excessive cost, is yet considerably used probably on account of its lack of bitterness. This salt, if salt the ordinary article may be called, contains a very low, in fact the very lowest percentage of quinine, and is also one of the most insoluble compounds of this base.

Tannin has a varied affinity for many substances, and in different degrees for the same substance. By reason of this peculiarity the quinium tannate, or tannolate, as ordinarily prepared, contains a very large excess of tannin compounded with free acid, so that the article is in reality a mixture. Manufacturers, indeed, endeavored to have the largest possible amount of tannin absorbed, deeming such a procedure perfectly legitimate in view of the fact that no recognized and definite standard for comparison exists. The bitterness of the substance, of course, diminishes in proportion to the deficiency of quinine contained in it, and the degree of its envelopment

by the inert acid tannolate. There is a quinium sulpho-tannolate of fairly definite composition which might with advantage replace the other so-called tannates. It may be readily prepared by the following formula : Dissolve 322 parts of tannin and 98 parts of potassium acetate in 10,000 parts of water, by the aid of heat, then add 872 parts of quinium sulphate, continue the heat for a few minutes, transfer the precipitate to a filter, and after sufficient washing dry it by exposure to the open air.

Syrup of yerba santa is growing in popularity as a vehicle for quinine in a tasteless form. As ordinarily prepared, it represents one ounce of the leaves in the pint, but a syrup of half this strength would be quite as good for general purposes. The active agent is an acid resin, which generates with quinine a nearly insoluble salt, which is decomposed by the common acids in the free acid resin and soluble quinium salt. The compound of quinine with the resin is a definite salt, and would be an excellent substitute for the indefinite tannolates of the market. It can be readily produced by extracting the leaves with water containing some alcohol and ammonia, and mixing the liquor with quinium sulphate, warming gently, washing the precipitate and drying it by exposure.

Syrup of yerba santa is best prepared by percolating one ounce of the leaves in coarse powder with water containing one drachm of ammonia water and two fluid ounces of alcohol in the pint, until one pint of liquor is obtained, and dissolving twenty-eight troy ounces of sugar in this with gentle heat. This syrup is clear and bright, having a deep brown red color, and slightly bitter but pleasant honey-like taste.

Quinium valerate in two crystalline forms in star-grouped needles, and in plates.

The first kind are obtained from a hot saturated solution by cooling, the second at a lower temperature by slow evaporation. The first is the most practical form, and most readily produced. Double decomposition is the only practical procedure for preparing the valerate. Two or three methods may be used, but the best process is that by double decomposition between quinium sulphate and calcium valerate in the presence of weak alcohol. This yields the salt chiefly in star crystals. The calcium valerate is generated by the action of valeric acid in aqueous solution on calcium carbonate. The reaction is almost instantly completed with copious effervescence. The

formula is as follows : Mix 204 parts of valeric acid with 5,000 parts of water, add 100 parts of calcium carbonate, and when effervescence has ceased and a clear solution has resulted, add 2,500 parts of alcohol and 872 parts of quinium sulphate. Now heat the mixture until decomposition is complete ; filter whilst hot, and rinse the residue of calcium sulphate with a little alcohol or weak alcohol, and set the filtrate aside to crystallize. Collect the crystals on a filter, drain, and dry in the open air. The drained liquor on evaporation will yield an additional crop of crystals.—*Abridged from an article by R. Rother, in the American Journal of Pharmacy.*


TYPHO-MALARIAL OR CONTINUED FEVER.—Dr. R. D. Webb concludes a paper in the April number of the *American Journal of the Medical Sciences* as follows : “Seeing, then, that fevers are so closely allied generically, and that even when separated into species, there are striking resemblances ; that pathological researches do not establish a constant anatomical lesion, which is pathognomonic of any one of them ; and that ulceration of Peyer’s glands (claimed as characteristic of typhoid fever) is frequently found in other diseases, we are justified in claiming that a continued fever, occurring under circumstances which point to a miasmatic origin, although it may present many of the vital phenomena of the typhoid fever, and occasionally its recognized anatomical lesion, is still malarial fever. There remains, to his mind, but one other explanation of these continued fevers, viz., that they are to be regarded as atypical typhoid fevers, originating *de novo*. But, admitting the origin, *de novo*, of typhoid fever from animal miasm, and that possibly it may have thus originated in the example he has given, even the warmest advocate of this view will be unable to bring those sporadic, isolated cases which occur again and again in malarial, but otherwise salubrious and healthy country localities, within the rôle of such instances as are claimed as establishing this mode of origin. The natural conclusion, taking all the facts into consideration, is that they are malarial fevers of a typhoid form, using the term typhoid, not in a specific sense, but as indicating a typhoid condition of the system.

EDITORIAL.

THE NORTH CAROLINA MEDICAL JOURNAL.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY, PUBLISHED IN
WILMINGTON, N. C.

THOMAS F. WOOD, M. D., Wilmington, N. C., Editor.

 *Original communications are solicited from all parts of the country, and especially from the medical profession of THE CAROLINAS. Articles requiring illustrations can be promptly supplied by previous arrangement with the Editor. Any subscriber can have a specimen number sent free of cost to a friend whose attention he desires to call to the JOURNAL, by sending the address to this office. Prompt remittances from subscribers are absolutely necessary to enable us to maintain our work with vigor and acceptability. All remittances must be made payable to THOMAS F. WOOD, M. D., P. O. Drawer 791, Wilmington, N. C.*

THE NORTH CAROLINA ACCIDENT.

II.

When the proposition was being discussed in the medical journals about the establishment of a vaccine bureau under the direction of the government, it was remembered by but few writers on the subject that the government had once tried the experiment. In fact, from what we can learn from the debate in the *History of Congress*, (H. of R., 1822-23) that although the law by which the Baltimore establishment under the management of Dr. James Smith was created, was entitled "An Act to Encourage Vaccination of 7th February, 1813, it only provided that "an agent should be appointed to preserve the genuine vaccine matter, and he to be clothed with the privilege of franking the packages, containing it, to his subagents."

That the first experiment proved a failure is not to be wondered at; but that it should have resulted from the misadventure of such a careful and experienced man as Dr. Smith, made the whole affair more difficult to rectify. If a professional vaccinator and propagator of vaccine, with all the skill he could bring to his task could not

always be certain about the validity of the crusts he sent out, the office was useless, and the bureau ought to be abolished and the people allowed to take their own chances.

The following narrative of the affair appeared in the *Vaccine Inquirer* of 1822, (No. 1. pp. 45-47) and while it may not have been from the pen of Dr. Smith was a defense emanating from the editorial department of this Journal of which he was one of the editors:

“SMALL-POX IN THE TOWN OF TARBOROUGH, IN NORTH CAROLINA.

“A number of papers relating to the unfortunate introduction of the small-pox into the town of Tarborough in North Carolina are at hand.

“The whole difficulty which has occurred, has finally resolved itself in the fact, that the true small-pox matter was sent by Dr. James Smith to Dr. John F. Ward, a resident physician in Tarborough, by mistake, instead of the genuine vaccine matter as intended.

“This matter was forwarded by mail about the first of November. Dr. Ward's letter acknowledging the receipt of it bears date 29th December, 1821, in Bertie county some distance from Tarborough.

“Dr. Ward does not state when he first commenced using this matter, but in his letter to Dr. Smith he informed him, ‘that the *vaccine matter* received, had a very different effect upon those he vaccinated, than could have been expected.’

“‘Twelve out of fifteen, in whose cases the matter was used,’ he states, ‘had a crop of pustules.’ The disease produced by this matter, did not prove fatal to any of the persons inoculated with it, but the contagion produced by these operations was soon communicated to others and proved fatal to a considerable number of persons who had not been vaccinated.

“In his letter to Dr. Smith, Dr. Ward advises, that ‘although he had never seen a case of variolous disease, he was under the necessity of stating to his friends, that he believed this to be a disease of the kind.’ And he concludes by asking Dr. Smith ‘to give him what information he could on the subject.’

“Dr. Smith's reply to Dr. Ward seems to have been written on the instant he received the above information, viz: on the 10th January, 1822. He begs Dr. Ward ‘to continue to investigate the nature of the disease which had been produced by the vaccine matter he sent, and to communicate with him again on the subject, as

soon as possible.' A few days after this, viz: on the 14th January, Dr. Smith (fearing that Dr. Ward might be still absent from town,) wrote Dr. Hunter to engage him to investigate the business, and to state to him more particularly the several points in which he wanted information.

" Dr. Smith wrote to Dr. Hunter that ' he was fearful the persons from whom he procured this matter might possibly have had their systems infected with the contagion of small-pox previous to their vaccination. He urged Dr. Hunter, therefore, to investigate the whole business *promptly* while the first cases that occurred could be most easily examined.'

" Dr. Ward had, unhappily, omitted to give any description of the packet of matter he had been using ; so that Dr. Smith had no reason to suspect he had sent him any other than a packet of vaccine matter of the same parcel of which he had sent to Dr. Hunter and many others in North Carolina.

" The public are much indebted to Dr. Hunter, who first discovered the nature of the mistake that had been made ; or at least he furnished Dr. Smith with such information respecting the packet of matter that had been sent on there, as enabled him at once to unravel the whole mystery and to account satisfactorily for every difficulty that had presented itself.

" Dr. Smith had fortunately marked the paper which contained this matter he sent to Dr. Ward, with the word ' variol' (the latter term contracted) that signifies small-pox. To this he also added his own private mark which he used for '*perfect crust*' or scab. He also wrote on it the name of the person ' Whitfield' from whom he took these scabs, and the time (4th October, 1821) when he got them.

" By accident, this paper (after having been kept nearly a month by Dr. Smith) become mislaid and by some fatal mischance it was folded with some papers that were enclosed to Dr. Ward, and sent to him instead of a packet of vaccine matter as was intended.

" If Dr. Ward had been at all conversant with either the kin-pock or small-pox scabs, he could not have failed to have detected this mistake, and to have certainly prevented all the injury that has happened. A small-pox scab offers as much from a vaccine crust as a grain of rye from a grain of wheat, or a potato from a turnip. No moral guilt, however, should attach to Dr. Ward in consequence of his being deceived ; neither can any good or charitable person,

we presume, entertain a thought for a moment, that either Dr. Ward or Dr. Smith would voluntarily destroy the lives of their fellow creatures to their own certain injury, and without the possibility of good to themselves, or others.

“ Proceedings in Congress, (p. 48)—The Spreaker presented the following letter from Dr. James Smith, vaccine agent, which was referred to a select committee and ordered to be printed:

“ BALTIMORE, Feb. 14th, 1822.

“ *The Honorable the Speaker of the House of Representatives :*

“ SIR :—From letters which I have received from Dr. Hunter, of Tarborough, in North Carolina, I am fully persuaded I have discovered the true cause of the deplorable events which have happened there ; and I am now satisfied, that they have originated from an accident; such as never occurred before and there is no danger that the like will ever occur again.

“ I had a paper which contained a small-pox scab taken by myself from a person named Whitfield, about 4th October, 1821, and on this paper I had written carefully to avoid accident, that it contained the variolous of small-pox matter. But this paper was afterwards mislaid, and after searching for it in vain, I had concluded it was lost, and supposed it might have been swept out of my office. From the information, however, which I have received from Dr. Hunter, quoting the words I had written on it, I have no doubt, that the same identical paper I had lost, containing the small-pox scabs and marked as such, was put up in Dr. Ward's letter by some mistake, or inadvertence; instead of the glasses of vaccine matter, which I intended to send him, and which, from his letter to me, I suppose he had received and used.

“ We may now, therefore, safely conclude, that, the injury done is of more limited extent than I feared, and every citizen of North Carolina has it in his power to be secured from it, if they will use the vaccine matter I have sent them. Dr. Hunter assures me, that the vaccine matter obtained by him from this institution, and which he was using when he wrote me, 10th ult., was such as ‘ he knew to be genuine.’

“ I hope you will be so good as to make the contents of this letter known in the House of Representatives and I will be happy to furnish you, or any committee of Congress who may be appointed to make inquiry on this subject, with any fact relating to it, which has,

or may hereafter come to my knowledge. I have the honor to be
with great respect, Your obedient servant,

“JAMES SMITH.”

The “North Carolina Accident” was presented to Congress so cogently by Mr. Burke, that a Committee was appointed to inquire whether it be necessary to make any modification of the law passed in 1813, to “Encourage Vaccination.”

Much to the honor of this committee, be it said, they were sensible men, free from any of the modern tincture of unbelief, of which we have read such a sickening exhibition, recently, in the Massachusetts Legislature. They did not deem it necessary to report the various reflections which presented themselves upon the subject of vaccination, but felt a confidence in the belief that the opinion heretofore entertained of its being a preventive of the small-pox is well-founded, and believed it one of the greatest benefits bestowed upon the country, “*and one that ought to be cherished by every citizen of the republic.*”

Further on in the same report they say : “It is proper to remark, that the disease called varioloid* seems to partake more of the character of small-pox than of vaccine, and that there is no fact within the scope of their inquiry, to induce the committee to believe that vaccine ever has degenerated into varioloid. It is unquestionably true, that instances have occurred where persons have taken the small-pox, after having the vaccine, though such instances are as uncommon as it is for persons to take the small-pox a second time.” Happy those days, when Congressmen sought to inform themselves upon matters appertaining to the health of the people !

But to return to the original narrative. Dr. Ward in reply to a letter from Dr. Smith, dated 28th January 1822, says : “Not less than forty or fifty persons are now laboring under the disease [small-pox] taken in the natural way. Five only, as yet, have fallen victims to this dreadful disease. Many are recovering from it, but I have just visited two, who I think must die.

I have not time, at this moment, of stating to you the symptoms and dates thereof of those cases which I have attended. I discover it is a disease which the vaccine arrests in its progress. I, however,

*There was a wide-spread difference of opinion at this date (1822) as to the nature of varioloid. The French *Comité Central* at first called it *varicella* and then suggested *variolette*.

have known two persons, who have been vaccinated, take the disease. What effect the vaccine had upon them I know not. I shall make all the observations I can upon the cases that come under my notice, and keep a correct history of them. The matter which I used after I suspected small-pox, was the produce of matter you sent to Dr. [B. F.] Hunter before the 6th November, [1821]. It had a very happy effect. You will, no doubt, be surprised to learn that so many cases have occurred in the natural way, when I inform you that I vaccinated at such an early period, after suspecting the nature of the disease, and that it had most happy effects. But, sir, very few believed with me that it was small-pox; and Drs. Hunter and Daney, in my absence from Tarborough, at my father's, issued certificates, stating that the report of small-pox being in town and its vicinity, was false and unfounded, in open contradiction to our opinion which Dr. Boyken and myself had expressed in a note addressed to the Commissioners of Tarborough, before I visited my father. I expressed my opinion freely to the citizens of Tarborough as soon as I suspected the nature of the disease. I vaccinated in the families where the suspicious disease was, as soon as I could obtain matter. I made application to three different places for matter, viz: to John Cameron, of Fayetteville, Dr. Purrington, Scotland Neck, and Henry A. Donaldson, Falls of Tar River. I obtained it from the last mentioned, who obtained it some time before from Dr. Hunter. I received matter afterwards from Messrs. Cameron and Purrington. Every part of my conduct, after I suspected the nature of the disease, I now contemplate with the greatest pleasure."—*Vaccination Inquirer*, No. iii, 1822.

Another letter (no date but some time in 1822) from Dr. Ward to the *Raleigh Register* shows another stage in the discussion:

MESSRS. GALES & SON:

Having noticed an address to the citizens of the United States, by Dr. James Smith, of Baltimore, in which he endeavors to account for the introduction of small-pox in Tarborough and its vicinity, I was not a little surprised to find, that he had charged me with entirely neglecting the directions which accompanied his fatal matter.

He also states, that "had I used the matter he sent me in *proper time*, and attended to sending him the *crusts* which it produced, he would have been able to have answered all my queries, and have prevented *all* the mischief which he fears has happened." A detail

of my conduct in this business will prove to every reflecting mind, that the doctor's assertions are illiberal and unfounded."

Then follows the rules adopted by the National Vaccine Institution, under which Dr. Ward was acting, in proof of the declaration of the latter, that he was following instructions.

A letter from Hon. R. M. Sanders, then a member of Congress, shows how great the feeling was against Dr. Smith:

WASHINGTON, 25th March, 1822.

SIR:—I return the enclosed (No. 1 of the *Vaccine Enquirer*) received in due course of yours of the 14th instant. I feel no disposition to give any countenance, much less support, to a man who has been the means of doing so much mischief to the citizens of my State. Whether the mischief at Tarborough, N. C., arose from accident or design though not equally criminal, is, with me, at least without excuse. I have the honor to be, &c.,

R. M. SANDERS.

We make one other quotation from the special committee appointed to enquire into the propriety of repealing the vaccine act of 1822, by Mr. Burton, of North Carolina:

" * * * While the committee would on no account offer a suggestion which could be construed to employ a doubt of the efficacy of vaccination, they conceive it may, nevertheless, be a question, whether the general government can beneficially interpose for the furtherance of an object which seems, in a peculiar manner, to appertain to the municipal authorities in the several States, and which must of necessity, be finally committed to the management and discretion of professional men, possessing the confidence of the community. All our regulations for the preservation of the public health are questions of police, wisely committed to those immediately interested, and therefore most likely to adopt efficient measures for their own safety."

After a discussion which occurred in the House of Representatives, April 29, 1822, the Act to Encourage Vaccination was repealed.

We have given a sketch of the feeling on both sides in this controversy, and trust that we have rescued from oblivion the first important lesson learned in this country on a matter of public health.

REVIEWS AND BOOK NOTICES.

BOARD OF HEALTH REPORTS.

1.* This volume gives us the work performed by the Connecticut Board of Health, and of the Bureau of Vital Statistics. The table of contents is attractive, and comprises the following subjects: "Hating as Affecting the Health of Operatives," reprinted by permission from the third New Jersey report; a report of the "Tenth Annual Meeting of the American Public Health Association;" "Sanitary Arrangements of the New Hospital Buildings at Middletown Connecticut;" "Syllabus of a Course of Lectures by Prof. W. H. Brewer."

We will pause at this article for a moment to call the attention of our readers to the fact there is one place in the country where sanitary science is taught. This syllabus is of a course of lectures delivered by Prof. Brewer before classes of the Sheffield Scientific School of Yale College.

The general headings are:

I. *Sanitary Science*," its objects and aims; its relation to physical sciences; how it differs from personal hygiene; methods of investigation; classification of cause of death; death-rate and the argument of averages; what is meant by preventable diseases; some of the special dangers of modern civilization; some results already achieved.

II. *Epidemics, Plagues and Pestilences*, how they travel and spread, and their relations to material prosperity and commerce.

Foods.—Sanitary relations; adulterations; cookery, etc.

Social Customs and Education.—Sanitary aspects of certain social facts; of fashions in dress; alcohol and narcotics; disposal of the dead; school hygiene.

Healthy Houses.—Situation; internal dangers; plumbing, &c.

Sanitary Administration.—Boards of Health; Quarantine; social statistics; sanitary laws, &c.

Conclusion.—Present status of sanitary science; effect on average expectation of life; relations to public wealth and material prosperity, &c.

*Fifth Annual Report of the State Board of Health of the State of Connecticut, for the Fiscal Year Ending November 30th, 1882. Printed by order of the Legislature. 1883. Pp. 323—127.

Dr. C. A. Lindsley, the author of several excellent papers on matters appertaining to the public health, contributes one pertaining to "The Uncertainties and Risks Attending the Use of Proprietary and other Ready-Made Medicines."

Dr. Lindsley has made a strong argument, and if it will succeed as well in arresting the evil caused by patent medicines, as surely as it will excite the ire of manufacturers he will have done a good service.

We would like to dwell longer upon this excellent volume, but as we must pass on to the next, we, in conclusion, thank the Secretary of the Connecticut Board, for the good he is doing for all engaged in similar studies.

2.* This large volume shows how earnestly the Secretary of the State Board of Health of Michigan, Dr. Henry B. Baker, still continues to work. It has been suggested recently in a well-known medical journal that the collection of essays on the various topics of public health, is of little consequence; but we speak from experience when we say that it is by these very papers, if they are well written, are by far more effective in helping forward the education of the public, than any amount of vital statistics. Dry tables of figures, although indispensable, repel all but a few trained scholars; but as long as sanitary science is in a crude state of existence, elementary lessons must be written and re-written.

This volume is by a Secretary who devotes his whole time to it. The table of contents is rich in subjects of special and general interest, and like its fellows, this volume must also take a prominent place in the library of every sanitarian who desires the work of the best teachers.

3.† Dr. E. M. Hunt, Secretary of the New Jersey Board of Health, has long been known as one of the profoundest thinkers on sanitary matters of all the sanitarians who have been best known in this country. This report discusses "Local Epidemics; Water Supply; Malaria; City Sewers; Disposal of Sewage; Offensive Trades and Manufacturers; Local Health Boards and Duties; Sanitary Condition of the State House; Contagious Diseases of Animals; Vaccination and Small-Pox."

*Tenth Annual Report of the Secretary of the State Board of Health of the State of Michigan, for the Fiscal Year Ending September 30th, 1882. Pp. 592.

†Sixth Annual Report of the Board of Health of the State of New Jersey, for the year 1882.

Papers and reports on various subjects of great interest are appended, viz.: "Small-Pox and Vaccination," being communicated to the Secretary in reply to enquiries sent out by him. This volume has been so largely sought after, that the edition is already running low.

4.* The first work of the Ontario Board explains fully its admirable plan of organization. It contains chapters on the "Collection and Dissemination of Sanitary Information;" "Investigations into the Causes of, and Remedies for, Various Outbreaks of Disease;" "Abatement of Nuisances;" "Sanitary Statistics;" "Work to be Done," &c., &c. All the chapters in this volume abound in earnest, thoughtful and hopeful expressions and demonstrate that our neighbors do not propose to be left behind in the race for sanitary reform.

ALCOHOL INEBRIETY: FROM A MEDICAL STANDPOINT WITH CASES FROM CLINICAL RECORDS. By JOSEPH PARRISH, M.D. Philadelphia: P. Blakiston Son & Company, 1012 Walnut Street. Price \$1.25.

This book is on one of the best discussed topics of the times. The author is confident of his positions. But right or wrong, little good can be expected in the way of reforming drunkards, by admitting that the love for alcoholics is a pathological condition, or a condition due to an imperfection of the organization. Drunkenness is a vice which doctors can help to mend, but more in their office of friendly counsellors than as physicians. As a contribution to the discussion this book has the merit of being temperate and thoughtful, and deserves to be read.

HAND-BOOK OF THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE THROAT, NOSE, AND NASO-PHARYNX. By CARL SEILER, M.D. Second Edition Thoroughly Revised and Greatly Enlarged. With 77 Illustrations. Philadelphia: Henry C. Lea's Son & Co. 1883.

The first thing that will strike the attention of the reader of this little volume, will be the beauty of the illustrations, and the general mechanical execution.

The author has done his part with skill, producing a book having

*First Annual Report of the Provincial Board of Health of Ontario, being for the year 1882, Toronto: C. Blackett Robinson, 5 Jordan Street, 1883.

no vestige whatever of that popular manner of expression which has spoiled several other wise good books on kindred subjects. An ample bibliography is appended, and a useful and complete index.

STUDENT'S GUIDE TO DISEASES OF THE EYE. By EDWARD NETTLESHIP, F.R.C.S., Ophthalmic Surgeon to St. Thomas' Hospital, London. Second American from the Second Revised and Enlarged English Edition. With a chapter on Examination for Color Perception. By WILLIAM THOMPSON, M.D. Philadelphia: Henry C. Lea's Son & Co. 1883. Pp. 413.

For the general practitioner and the medical student we have seen no work superior to this volume. It is written in clear and precise language, with all the pictorial diagrammatic aids necessary to a clear conception of the text. It is full without being prolix, it is concise without marring the clearness of the descriptions.

A MANUAL OF AUSCULTATION AND PERCUSSION; EMBRACING THE PHYSICAL DIAGNOSIS OF DISEASES OF THE LUNGS AND HEART, AND OF THORACIC ANEURISM. By AUSTIN FLINT, M.D. Third Edition. Philadelphia: Henry C. Lea's Son & Co.

No student can afford to overlook this manual of auscultation and percussion in purchasing his working library. To the physician in active practice it is a clear and reliable remembrancer, and well arranged for hasty consultation. Dr. Flint has always been considered a successful writer, but his later books show a degree of ripeness and vigor, attractive to the student, and in the highest degree reliable.

THE PHYSICIAN HIMSELF, AND WHAT HE SHOULD ADD TO HIS SCIENTIFIC ACQUIREMENTS.

Having noticed this little volume previously, we have little to add, except to say that it has reached a third edition, and that we did not misjudge its popularity. Doctors in this State are pretty familiar with it by this time.

PROGRESS OF MEDICINE.

It is a matter of observation that salt or salted food increases the activity of podophyllin, and lactic acid diminishes it. In practice, therefore, sour milk, or buttermilk is resorted to as a means for relieving the effects produced by an excessive dose.—*New Remedies*.

RECOVERY FROM A FISH-HOOK IN THE ŒSOPHAGUS.—Dr. Goldsmith in the *Lancet*, Nov. 1882, p. 745, reports the case of a lad, aged 10, who was admitted into the Bradford Infirmary eleven hours after having swallowed a fish-hook. He suffered only from pain over the episternal notch; there was a piece of catgut protruding from the mouth. The patient being under chloroform, a piece of silk ligature was tied to the end of the gut, and a fine wire to the end of the silk, and a full-sized œsophageal bougie directed thereby to the bend of the hook; here slight resistance was felt, but was easily overcome by pressure; the bougie and hook were carefully withdrawn with little or no trouble. The hook proved to be a No. 6 perch, and the gut was nine and a half inches long.—*London Medical Record*.

A SIMPLE AND INGENIOUS INSTRUMENT FOR REMOVING FOREIGN BODIES FROM THE EAR.—Dr. Louis B. Couch, of Nyack, N. Y. sends us the description of a little instrument which any jeweller can make, and which, he says, is very useful and efficient in removing foreign bodies from the ear. The description is as follows:

I have been interested in the late discussion going on in your journal with reference to the best methods for the removal of foreign bodies such as corn, beans, etc., from the auditory canal or nares, and herewith transmit my mite to the general fund of information.

Take a piece of eight-sided brass wire, or round wire with roughened surface, and drill into either end a small hole a quarter of an inch deep. Into one end bronze or solder a small twist drill one thirty-second of an inch in diameter, and into the other a nice sharply cut screw (such screws may be obtained of any jeweller) of about one twenty-fifth of an inch in diameter. When this is done, you are ready for your smart boy with more beans in his head than brains.

Suppose the bean is at the bottom of the auditory canal, enlarged and surrounded by inflamed swollen tissues, a small portion only being visible.

Introduce the speculum, and carefully with light pressure drill into the presenting portion of the corn or bean to the depth of about one-quarter of an inch, and clear off all dust, then reverse the instrument and insert the screw and the bean must come.

I have by actual test inserted my sample instrument into a bean, and sustained with it a weight of twenty-five pounds, as shown by scales; a holding power far in excess of that required for the removal of any such bodies.

Physicians will be surprised at the rapidity with which the drill will perforate the hardest of dry beans and the slight pressure required. Care, however, should be exercised in first entering the drill, that it does not slip.

I confidently recommend this instrument to the profession in all cases for which it is applicable.—*N. Y. Medical Record*.

JEQUIRITY.—The seeds which have been recently introduced under this name as a remedy in ophthalmic complaints, are derived from *Abrus precatorius*, a leguminous plant, indigenous to Africa and Southern Asia, and naturalized in tropical America. The hard seeds have a bright red integument with a black spot surrounding the raphe. They are used in Oriental countries for ornaments and similar to beads; in Brazil they have been highly valued for several centuries in the treatment of certain diseases of the eyes, an infusion being made of 32 powdered seeds (about 3 gm.), which are macerated for 24 hours with 500 gm. cold water, after which 500 gm. of hot water is added, and, when cooled, the liquid is filtered.

The results obtained by L. de Wecker, show that this infusion produces conjunctivitis purulenta or eruposa as rapidly as inoculation, and that with due care, the desired inflammation may be well regulated. The experiments have not been concluded yet, and the active principle of the seeds is still unknown; an alkaloid prepared by Rigand & Dusart, did not give similar good results, whether used by instillation or subcutaneously.—*Phar. Centralhalle*, 1883, p. 145. *Klin. Mon. f. Augenheilkunde. Am. Jour. of Pharmacy*.

THE USE OF JEQUIRITY IN EYE DISEASES.—This remedy was first brought before European practitioners by De Wecker in the *Annales d'Oculistique* for July-August, 1882. The seeds of the jequirity plant, the *Abrus precatorius*, have been since a long

time employed by the natives in some parts of Brazil in ocular affections. This method of treatment was first made known to De Wecker by one of his old patients, who, subsequently to his return home to Brazil from Paris, suffered a fresh outbreak of granular conjunctivitis, from which he was much relieved by the use of this drug.

The directions given were to soak for twenty-four hours 32 grains of the powdered seeds in 1,000 grammes of water. The patient bathes his eyes with the filtered product thrice daily for three days, at the end of which time he has become the subject of a severe conjunctivitis, which may be either purulent or more allied to the diphtheritic form. By the fifteenth day the inflammation ceases, and the granulations are found to be much diminished in size, or even destroyed.

The same author presents in the *Annales d'Oculistique* for November-December, 1882, an article on the ophthalmia produced by jequirity.

From numerous experiments he draws the following conclusions :

1. Without doubt, jequirity produces a purulent or even diphtheritic conjunctivitis, whose intensity can be readily regulated by the strength of the solution employed and the number of its applications. The strength may be anything between that given in the paper just referred to, and 10 grammes in 500 grammes of cold water.

2. The cornea runs no risk during the use of this remedy. It is true that in one case he has seen it suffer slightly and temporarily, but this was only when the applications had been pushed to such an extent that a membrane of the true diphtheritic appearance was produced.

3. The ophthalmia of jequirity cures granulations rapidly, and it is less unpleasant and less dangerous than that produced by the intentional inoculation of blenorrhœic matter.

He thinks that the ophthalmia of jequirity, which subsides spontaneously after eight to twelve days, can only be effectively produced while the patient resides within the walls of a hospital. Its curative effect on granulations and on corneal opacities goes on for a very considerable period subsequent to the inoculation.

In the same number Dr. Monra Brazil, of Rio de Janeiro, discusses the treatment of granular conjunctivitis by jequirity. It appears that as early as 1867 Dr. Castro y Silva, of Ceará, published

a memoir in which he speaks of the dangers attendant on the injudicious use of jequirity, so that it must even then have been well known in some districts of Brazil. The mode of preparation appears to have been as follows: The ripe seeds were soaked in cold water in the proportion of 1 to 500 for two or three days, or in boiling water for a few hours. Afterwards the embryos alone were picked out, reduced to fine powder, and then macerated for twenty-four hours. The infusion was finally filtered, and applied thrice daily between the lids for three days.

Dr. Moura Brazil records his own experiments on rabbits, which certainly show that under certain circumstances the inflammation may become violent and even quite uncontrollable. An infusion of the seeds in the proportion of one to twenty produced a severe diphtheritic conjunctivitis, followed, notwithstanding all treatment, by destruction of the cornea and suppurative panophthalmitis. Using the radicle and gemmule without the cotyledons, he found the inflammation less intense, though still beyond what he wished. In his treatment of patients with granular lids he has used it with great advantage at all stages of this affection, using the seeds freed from their covering and from the radicle and gemmule, in the proportion of one in twenty. He is clear in strongly recommending its use as beneficial in all stages of granular ophthalmia, and as infinitely superior to inoculation with blennorrhœic matter.—*W. A. Brailey, M.D., in London Medical Record.*

WHY IS THE HEAD PRESENTATION THE MOST FREQUENT?—The causes which determine the position of the fœtus *in utero* have long been a subject for argument. There can, we think, be no question that the action of gravity is the most constant of the forces acting on the fœtus. Dr. Matthews Duncan has shown that the position into which the action of gravity, if unopposed and unmodified, would bring the fœtus, is that which it actually does assume; and we may therefore conclude that gravity is not only the most constant, but the most powerful of the forces which determine the fœtal position *in utero*. But it is not the only one, for if it were, living children at term would always present with the head. Sir James Simpson invoked the movements of the fœtus, his theory being that when the fœtus presented by another part than the head, its shape was not so well adapted to that of the uterus, certain parts of it were unduly

pressed on, and thus reflex movements were excited, the effect of which was to put the fœtus in the more comfortable position. In a recent number of the *Archiv. für Gynäkologie*, Dr. Meeh elaborately studies the effect of the fœtal movements with relation to the position the child assumes *in utero*. The answer which he gives to the question, Why does the fœtus present oftener with the head than with the breech? is the following:—That part of the uterus which lies within the pelvis, and (being surrounded with a bony ring) is unyielding, while the rest is very yielding, retains the head of the fœtus longer than the breech on account of the different length of the leverage exerted by the upper and lower limbs of the child respectively. Extension of the fœtal limbs alters the position of the child more easily if they come into contact with the hard, unyielding pelvic segment of the uterine wall (as is the case in breech presentations) than if with the more roomy and yielding part of the uterus which lies in the abdominal cavity (as in head presentations). The movements of the lower extremities exert a greater effect in altering the fœtal position than those of the upper, because the lower extremities are further from the centre of the child's body, and therefore act with more powerful leverage.—*Medical Times and Gazette*.

THE ANALYSIS OF QUININE PILLS.—The recent publication of the *Medical News* of an analysis of the quinine pills of the market, without the signature of the chemist responsible for the analysis, and the evident defects and errors inherent in the published figures, elicited such a protest from the manufacturers, that our esteemed cotemporary, the *Chicago Pharmacist*, undertook to have a fresh analysis made, by a chemist of repute, whose name should be published with the results, in order to give a *final* and *reliable* report. The manufacturers were asked whether they consented to this, and favorable replies were received from all but one; but some of the replies attached certain conditions, as, for instance, that the analysis should be made in presence of the chemist representing the house. These conditions appear to have been ignored, but the editor of the *Pharmacist* offers to have the analysis repeated, on the remaining half of the samples, in presence of a representative from each house.

The chemist selected by the editor of the *Pharmacist* was Prof. C. Lewis Diehl, of Louisville, and the report of the latter is

published in the April number of the *Pharmacist*. The editor prefaces the report by an introduction in which he states that Prof. Diehl urgently requested that the *names* of the firms be withheld from publication, on account of the *endless* controversy *any analysis*, however true and perfect it is, will cause. The editor remarks that he would have done so, were it consistent with his promise, but he could not do so. We regret exceedingly that he should have disregarded Prof. Diehl's request, because, in our humble opinion, the published analysis does not settle the question at all. We have every confidence in the ability and conscientiousness of Prof. Diehl, but we have some personal experience with quinine assay, and have very strong doubts whether all the steps of the process, as detailed in Prof. Diehl's report, will be proof against criticism. We doubt very much whether they would have obtained identical results in following, each, the process he considers the most accurate. For it is one thing to determine the amount of *total* alkaloids in bark or in a mixture or the amount of *ether*-soluble alkaloid, or even the amount of *quinine* the manufacturer will be able to obtain from a bark; but it is an altogether different thing to *separate* quinine from a mixture, and to be able to say : "1st, this is quinine and nothing else; 2d, the other portion is not quinine, and does not contain any; 3d, the proportion of the quinine I find by analysis in the total alkaloids is the same as was present in the original quinine employed by the manufacturer." Unless these three fundamental questions are fully and positively answered by the analysis, we hold it to be of no value.

It is our conviction that the action of the *Pharmacist* and the report of Prof. Diehl will form the starting-point for a fresh and exhaustive study of this most difficult part of organic quantitative analysis, and will result in furnishing us methods of separation and assay that may be thoroughly reliable.—*New Remedies*.

TREATMENT OF WARTS.—M. Vidal employs the following procedure, especially when the lesion is placed on the hands:—Having spread a layer of black soap on a piece of flannel, he binds this kind of plaster over the part so as to keep it *in situ* during the night, and, if possible, during the day also. After a few nights' repetition of such application, the wart becomes softened or dissolved, and it now only requires to be scraped to secure its complete disappearance.—*Jour. de Méd. Prat.*, February. *Med. Times and Gaz.*

OLEATE OF QUINIA.—This, although it has not attracted general attention, is probably one of the most important of the oleates. From the larger quantity of quinia needed in medicine this oleate is made as strong as possible. While a normal oleate of this alkaloid would by calculation contain about 53 per cent. of the alkaloid, it has found impracticable to dissolve that quantity in the acid. In a series of experiments made some years ago when this oleate was introduced, it was concluded that 25 per cent. was the best proportion. But as the quinia of the market holds some hygrometric moisture, it is better to take 26 grains of the alkaloid and 74 grains of oleic acid as the formula. The alkaloid is simply rubbed to powder, and added to the acid in a bottle. Like the other alkaloids this dissolves so readily that being in much larger proportion, it is liable to clog together and be slow in dissolving. But this clogging together is easily broken by means of a glass rod. Or the solution may be effected in a capsule and the clogging be prevented by a pestle. In this way it is easily made in a very few minutes. A fluid ounce of this oleate weighs about 410 grains, and, therefore, contains about 102 grains of quinia, which is equivalent to about 140 grains of the ordinary sulphate of quinia. Therefore, a fluid drachm contains the equivalent of about 17 grains of the sulphate, and a minim is equivalent to a little more than a quarter of a grain. An hypodermic injection of a fluid drachm will, therefore, carry the equivalent of 17 to 18 grains of sulphate of quinia.

It happens, perhaps oftener with the administration of quinia than most other medicines, that the physician wants to save the stomach. And many conditions need quinia when the stomach will not accept it, or will not utilize it if given by the mouth. These circumstances have long indicated the hypodermic use of quinia, but up to this time no solution has been proposed that is well adapted to hypodermic use, first, because of the large dose required, and again, because of sparing solubility of available quinia salts. Hence this oleate has been sometimes used hypodermically, but with what success is unknown to the writer. The epidermic use, however, is of late not uncommon, and since it was first proposed occasional trustworthy testimony from private sources has led the writer to consider it an important adjunct to the more common methods of using quinia. The quantity of oleate needed here is considerable, often amounting to one or two fluidrachms. Hence it should always be applied

under oiled silk or gutta percha tissue. When put directly on the skin a minim will require about four square inches of surface or it will run, and a fluidrachm would require about two square feet of surface, an area hardly accessible under ordinary circumstances. But two pieces of very thin fine old muslin or linen, six by nine inches, will easily hold half a fluidrachm each, and may be applied to the insides of the thighs, covered by oiled silk. This leaves the abdomen available for another similar application if desirable, and the oleate can be renewed on these places as rapidly as it is absorbed. Another good way of applying it, especially in walking cases, to get a moderate continuous effect, is to annoint the spinal tract for an inch or more on each side of the spinous processes morning and evening with a half fluidrachm, and cover it with a strip of oiled silk under the clothing. The writer has heard of several instances in which ringing in the ears was speedily produced by such applications of the oleate.—*Squibb's Ephemeris*.

THE UNIVERSITY OF NORTH CAROLINA.—Independent of the steady increase of students as the annual catalogue for 1882-83, we hear on every hand from those able to judge, that the University is making substantial progress in its methods of teaching and discipline, and that never before has this great institution done as good work as now. We congratulate the officers of the University that their work is yielding fruit.

Of our own knowledge, the University of students who come before the State Board of Medical Examiners stand the best examination in chemistry.

MINUTES
—OF THE—
THIRTIETH ANNUAL MEETING
—OF THE—
MEDICAL SOCIETY OF NORTH CAROLINA.

FIRST DAY—MORNING SESSION.

TARBOROUGH, N. C., May 15th, 1883.

The Medical Society of the State of North Carolina met in the Opera House, in Tarborough, N. C., at 11 o'clock A. M., Tuesday, May 15th, 1883.

Dr. L. L. Staton, from the Committee of Arrangements, called the Society to order, and prayer was offered by the Rev. Mr. Wailes, of Tarborough.

Dr. N. J. Pittman introduced Mr. Donnell Gilliam, of the Tarborough bar, who delivered the address of welcome in behalf of the citizens and the profession.

Mr. Gilliam said :

Mr. President and Gentlemen of the Medical Society :

In behalf of the local Medical Society of this county and the citizens of Tarborough, I extend to you a most cordial welcome. It is gratifying to our pride to entertain such honored guests, and it is our pleasure to contribute all our powers of entertainment to minister to your pleasure and enjoyment. Whatever can prove of interest or pleasure, or in any manner conduce to your enjoyment, is sure

to engage the best endeavors of the courteous members of the local Society, to whom is especially entrusted your entertainment. The citizens of Tarborough propose to join them in this pleasant duty, yet they congratulate themselves upon committing you to the care of the local members of your profession so that you cannot but depart with the most delightful impressions of our town. I do not wish to anticipate you in these impressions, and present in the unmeasured language of pride the beauties and attractions of our home, but rather leave you to those courteous gentlemen to experience them for yourselves. Pride is its own chronicler, and I would not offend against the gentle virtue modesty; yet with all becoming observance of it I wish to set forth what we consider our just claims; which severally numbered are these:

That our town is the prettiest in the State, except, of course, the one in which each of you respectively reside.

That our people are the cleverest—and here we are willing to admit of the same exception.

That our doctors are the politest and smartest. That our young ladies are the sweetest and most accomplished, and we respectfully submit, that in this particular, we will hear of no exception.

These demands sound very unpretentious in our ears, yet if you are not perfectly ready to accede to them, we do not mind intimating that we seriously insist only upon the last; and if the members of this Society—I mean those yet sensible to those finer feelings of the soul stirred by woman's grace and loveliness, and, of course, there are none others present, for that is a feeling common to us all—will dare venture—and I use these words advisedly—to an encounter in Cupid's warfare with these young ladies, I am satisfied they will be ready to resolve, by an unanimous vote, that for pretty, fascinating, captivating young ladies, Tarborough, can't be beat.

Gentlemen of the Society, while I am at a loss to understand why I should have been chosen to speak the words of welcome to you on this occasion, I am in no measure surprised that the legal profession should have thus been honored.

It must be gratifying intelligence to you to know that medicine and law are old associates and partners, and certainly it is but natural that you should wish to commemorate this highly honorable connection. In those benighted times of mediæval history, when superstition and ignorance encompassed the earth, and learning like a smoking

star had vanished before darkest night, the germs of knowledge were preserved by the few ; and when violence and disorder were hushed in the ruin of the social state, these few advanced with their magic wand of power to reillumine the earth and revive social order. They applied themselves to three services which were considered of most consequence, to man—the protection of his property, the care of his body and the salvation of his soul. Thus, in early times we see joined in one class three distinct modern professions. It would, no doubt, be an interesting subject for speculation, to inquire how great were the benefits derived by the Church from this early and intimate association, with the two very pious and respectable professions of law and medicine, but we leave this for other hands. So from early times humanity has been the special property of the doctor, the lawyer and the preacher ; and though in modern days these professions have become separate and distinct, yet the doctor and lawyer retain still a joint interest in man, the one in his body, the other in his pocket book, while the poor preacher has been postponed, as we lawyers say, to a remainder, on the termination of the life estate, in the soul.

But I wander from my duty and purpose. An address of welcome, I conceive, should consist not only in breathing courtesy, but should serve also to proclaim the honors of the guests. This is indeed a most engaging subject, one inviting the richest gifts of eloquence and graces of oratory, one admitting of unmeasured panegyric.

Among the marvelous achievements of human progress and attainment of human capabilities, no science has proceeded to a more complete and rounded development, and earned a meed of greater glory, than that of medicine.

In the dim traditions of mythology the god of medicine triumphed over death and by his glorious deeds made emulous mission amongst the god's themselves, and drove great Jupiter to faction. Medicine has indeed triumphed over death. It has grappled with and vanquished countless forms of disease that assail the human race. It has banished plague and pestilence from the face of the earth. It has mitigated the disasters and calamities of life. It has warded off the shafts of disease that shoot across the atmosphere of human existence. It has soothed the dying and relieved the suffering. It has invaded the dismal abodes of poverty and despair and dispelled noxious and infectious disease. It has carried the wholesome and salutary influence

of light and air to the houses of toiling humanity. It has sustained the human frame under the wear and weariness of incessant toil and mad pursuit of earthly gain. It is, indeed, the staff of life. In the classic beauty of ancient poetry, medicine was conjoined with music, for in poetic fancy medicine attuned the curious harp of man's body to sweet accord with nature.

There should be no jar or violence to that mysterious frame ; no dissonance nor sudden snapping of the silver cords ; but in the orderly course of nature the golden bonds of existence should be gently loosened by the hand of time and the imprisoned spirit wafted on its eternal flight. In the early part of the year 1666, within the very heart of that great city, London, appeared that painful and deadly malady, the plague. The hand of a master has pictured what happened in those dismal months ; and in that truest of fictions, *The History of the Plague Year*, Defoe shows Death, with every accompaniment of pain and terror, stalking through the streets of old London, and changing their busy hum into a silence broken only by the wailing of the mourners of fifty thousand dead ; by the woful denunciations and mad prayers of fanatics ; and by the madder yells of despairing profligates. Our forefathers had their own way of accounting for this terrible calamity. They submitted to the plague in humility and penitence, for they believed it to be a visitation of Divine wrath. It would have astounded that ignorant people to have announced to them what modern science has demonstrated—that the plague was not a Divine judgment, but that they themselves were the authors of it, and that they must look to themselves to prevent the recurrence of calamities, to all appearance so peculiarly beyond the reach of human control. So evidently the result of the wrath of God.

Modern science has given us the explanation of this. It has taught us that pestilences will only take up their abode among those who have prepared unswept and ungarnished residences for them. That cities must have narrow, unwatered streets, foul with accumulated garbage. That houses must be ill-drained, ill-lighted, ill-ventilated. That subjects must be ill-washed, ill-fed, ill-clothed. Modern medical science has taught us something of nature, and we partly obey her. Because of this partial improvement of our natural knowledge and that fractional obedience, we have no plague but, because that knowledge is still very imperfect and that obedience is

yet incomplete, typhus is our companion and yellow fever our visitor. It is not presumptuous to express the belief that, when our knowledge is more complete and our obedience the expression of that knowledge, the earth will be relieved of all distempers, and human life no longer required to run the gauntlet of every disease—for the triumphs of the past are but the *earnest* of what shall be. “To *have done* is to hang, quite out of fashion, like a rusty mail in monumental mockery.”

Truth has no bounds, and as well might man think to build a tower from the top of which to grasp Sirius as prescribe a limit to the explorations of science. It is a mere spark of human intelligence that now shines amidst the abyss of the unknown and unknowable, but time will increase it to a luminous flame that will reveal the hidden secrets and illumine the mysteries of creation. We call this an age of improvement, an age of progress. It is so. But the Italians in the age of Leo X said the same of theirs. The Romans in the age of Cicero made the same boast; and the Grecians indulged the same vanity amidst the splendor, wealth and refinement of the age of Pericles. Art and science are progressive and infinite. Newton counted 3,000 fixed stars. Herschell pointed his great telescope to the heavens and 250,000 stars passed through its field in *fifteen minutes*. The Chaldean shepherd counted the hours of the night upon the face of the starry heavens and gazed in stupid awe and wonder upon the majestic loveliness of the firmament. Modern science has explored that untravelled realm far beyond the utmost bounds of human thought and brought back the secret of the spheres. Medical science moves in the van of all the sciences. It advances fearlessly to its encounter with the enemies of nature, and each hour records its daring triumphs. The republics of ancient times honored the votaries of medicine with gifts of golden crowns, initiation into the sacred mysteries, and with the dignity of free citizenship, your honors of to-day are not less illustrious. All greatness has an enduring monument. The fame of Newton is written on the face of heaven in the indestructible laws of nature. The fame of Franklin is borne on the roll of the retreating thunder. Your fame is lasting, imperishable. It is perpetuated in God's noblest handiwork, the races that inhabit the earth.

Gentlemen of the Society, I will detain you no longer. The

theme is inexhaustible, and to dwell longer upon it would, I fear, tire your patience.

“Sirs, you are very welcome to our home,
This must appear in other ways than words,
Therefore, I scout the breathing courtesy.”

Dr. J. K. Hall, the President, briefly responded.

The Secretary called the roll, and the following gentlemen answered to their names :

Dr. N. J. Pittman, Tarborough; Dr. S. S. Satchwell, Rocky Point; Dr. J. R. Mercer, Tarborough; Dr. A. B. Pierce, Halifax; Dr. H. W. Faison, Faison's Depot; Dr. Allman Holmes, Clinton; Dr. J. J. Summerell, Salisbury; Dr. P. E. Hines, Raleigh; Dr. A. G. Carr, Durham; Dr. J. K. Hall, Greensborough; Dr. Geo. A. Foote, Warrenton; Dr. F. M. Rountree, Kinston; Dr. Chas. J. O'Hagan, Greenville; Dr. J. W. Jones, Wake Forest; Dr. Wm. R. Wood, Scotland Neck; Dr. J. H. Hicks, Faison; Dr. M. T. Savage, Scotland Neck; Dr. Thomas F. Wood, Wilmington; Dr. Thomas C. Powell, Rocky Mount; Dr. Geo. L. Kirby, Goldsborough; Dr. J. P. Sugg, Tarborough; Dr. Chas. Duffy, Jr., Newberne; Dr. R. F. Lewis, Lumberton; Dr. C. S. Killebrew, Tarborough; Dr. W. T. Ennett, Burgaw; Dr. John McDonald, Washington; Dr. L. L. Staton, Tarborough; Dr. Geo. S. Lloyd, Tarborough; Dr. J. M. Hadley, La Grange; Dr. Jos. Graham, Charlotte; Dr. Thomas J. Moore, Richmond, Va.; Dr. J. H. Baker, Tarborough; Dr. T. D. Haigh, Fayetteville; Dr. L. J. Picöt, Littleton; Dr. David N. Sills, Castalia; Dr. W. C. Murphy, South Washington; Dr. E. J. Thorpe, Rocky Mount; Dr. D. W. Bulluck, Whitakers; Dr. W. H. Whitehead, Battleborough; Dr. C. W. Eagles, Sparta; Dr. R. A. Sills, Nashville; Dr. R. H. Speight, Tarborough; Dr. W. C. McDuffie, Fayetteville; Dr. Geo. W. Long, Graham; Dr. Richard H. Lewis, Raleigh; Dr. W. R. Wilson, Townesville; Dr. F. W. Potter, Wilmington; Dr. W. P. Exum, Wayne County; Dr. E. H. Hornaday, Willow Green; Dr. I. Wellington Faison, Mt. Olive; Dr. A. W. Knox, Raleigh; Dr. J. T. Sledge, Greenville; Dr. R. H. Hargrove, Robersonville; Dr. Julian M. Baker, Tarborough; Dr. Richard Dillard, Jr., Edenton; Dr. L. M. Powers, Plymouth; Dr. L. W. Hunter, Charlotte; Dr. W. W. K. Anders, Gravel Hill; Dr. E. T. Speed, Tarborough; Dr. W. P. Mercer, Toisnot; Dr. J. L. Nicholson, Richlands; Dr. John Whitehead,

Salisbury; Dr. J. A Collins, Enfield; Dr. C. M. Pool, Salisbury; Dr. G. E. Matthews, Ringwood; Dr. T. S. Burbank, Williamston; Dr. Thomas Hill, Goldsborough; Dr. Thomas M. Jordan, Hillsborough; Dr. A. J. Battle, Earpsborough; Dr. J. R. Irwin, Alexandriana; Dr. Henry B. Ferguson, Littleton; Dr. J. T. Strickland, Thomasville; Dr. J. B. Gunter, Durham; Dr. Marcus C. Hunter, Huntersville; Dr. J. R. McClelland, Mooresville; Dr. W. C. Galloway, Snow Hill; Dr. J. R. Staton, Tarborough; and honorary member Dr. R. Dillard, Edenton.

The President appointed the following committees:

COMMITTEE ON CREDENTIALS.

Dr. N. J. Pittman, Tarborough; Dr. Chas. J. O'Hagan, Greenville; Dr. W. H. Whitehead, Battleborough.

COMMITTEE ON FINANCE.

Dr. J. W. Jones, Wake Forest, Dr. John McDonald, Washington; Dr. R. H. Speight, Tarborough.

The President invited all the ex-Presidents present to a seat on the stage.

Dr. O'Hagan introduced Drs. Shields and Wheat delegates from the Virginia Medical Society and invited them to a seat on the floor, and to participate in the deliberations.

PARTIAL REPORT OF COMMITTEE ON CREDENTIALS.

The following gentlemen having passed successful examinations before the Board of Medical Examiners, are recommended for membership in the Society:

Dr. D. R. Schenck, Hillsdale, Guilford County, N. C.

“ S. H. Rogers, Raleigh.

“ H. I. Clark, Hamilton, Martin County.

“ B. L. Long, Hamilton, “ “

“ J. H. Anderson, Tarborough.

“ G. L. Wimberly, Tarborough.

“ S. T. Johnson, Tarborough.

“ H. H. Whitaker, Battleborough.

“ F. R. Harriss, Henderson,

Dr. H. B. Marriott, Battleborough.

“ J. C. Braswell, Whitakers.

“ W. W. Faison, Goldsborough.

“ N. H. Street, Pollocksville.

“ J. A. Stevens, Clinton.

“ W. O. McDowell, Scotland Neck.

“ Oscar L. Gregory, Halifax.

“ Wm. H. Bobbitt, Rockingham.

“ Wm. L. Hudson, Hawley's Store.

“ J. H. Scarborough, Trenton.

“ P. J. Macon, Warrenton.

“ Jas. M. Hodges, Mt. Olive.

“ E. G. Moore, Toisnot.

“ M. O. Bunn, Wilmington.

“ Isaac M. Taylor, Chapel Hill.

N. J. PITTMAN,	} Committee.
C. J. O'HAGAN,	
W. H. WHITEHEAD,	

Adjourned to meet at 3 o'clock.

FIRST DAY—AFTERNOON SESSION.

The Society was called to order at 3 o'clock. Dr. Hall, the President, in the chair.

Dr. Picöt read, for Dr. R. L. Payne, Jr., the report of the Section on the Progress of Surgery.

Dr. Foote moved its reference to the Publication Committee.

Dr. L. L. Staton exhibited a case of Abdominal Abscess with two fistulous openings, one just underneath the umbilicus, and the other in the right iliac region, both of which openings discharged pus and fecal matter. This is the history:

The young man here presented has been a sufferer from a trouble that we rarely meet, and when found, it is often obscure in its commencement, difficult of diagnosis, and frequently the practitioner finds himself a little confused as to the proper course to pursue.

The history of the case, as gathered from the young man, is briefly, as follows:

Three years ago he was quite ill with what was thought to be

fever, unable to lie in any position except upon the back, with thighs flexed upon the abdomen, the pain great and bowels constipated, notwithstanding frequent and large doses of the most drastic cathartics. He does not remember all that transpired during his illness, on account of frequent unconsciousness. When he presented himself to me, he was anæmic, and almost reduced to a skeleton—unable to straighten, owing to abdominal adhesion and inflammation. Physical examination revealed two large fistulous openings—one just below the umbilicus, the other in the right iliac region, from both, faecal matter and pus flowed freely. Diagnosis: Typhilitic abscess, in which the matter had been allowed its own time and way of exit. Knowing the tendency of all such cases to recover, I pursued the conservative course, by supporting the abdomen and using compresses over the fistulous opening.

Now, the points presented are interesting and important:

- 1st. What are we to do to prevent the formation of such abscesses?
- 2d. When formed, how and when should the pus be removed?
- 3d. How are we to treat the fistulous openings?
- 4th. If any surgical interference, what operation?

Now, of the 59 cases reported to the Surgeon-General of the U. S., 50 of that number recovered, 9 remained unhealed. The time required for the healing of 46 of this number was: 17, one month; 28, one year; 5, one to four years.

Nature unaided by surgical interference has failed to relieve the young man, and while his condition is greatly improved and he is to-day comparatively comfortable, nevertheless, he is a great sufferer and the inconvenience he often undergoes cannot be realized.

He now presents himself for your consideration, and a free discussion is most earnestly desired.

Dr. Haigh reported a case somewhat similar as to appearances. He saw no faecal matter, but the opening had a decided faecal odor. The patient recovered.

It began by a very severe abdominal pain, and a state so alarming as to indicate impending death. The symptoms resembled those of obstruction of the bowel. A large pus cavity formed which was opened by free incision. The escaping pus had a strongly faecal odor. He desired to learn the history of this case, but Dr. Staton could not say whether or not it was ushered in by symptoms of obstruction.

Dr. O'Hagan thought that, perhaps, Dr. Haigh's case was not one of faecal fistula succeeding perforation of the intestine, but one of perityphlitic abscess. All pus from these abscesses have a decidedly faecal odor. In this case he thought the best results would be obtained by treating the fistulae with probes covered with fused nitrate of silver after Lente's plan.

Dr. Moore thought that thorough cleanliness and washing out the fistula with weak solution of carbolic acid should be resorted to.

Dr. Jones said the case reported by Dr. Staton came under his care. It began with obstinate constipation, and faecal matter passed by one of these openings.

Dr. Foote said he would follow the German surgeons and cut the two openings into one and burn it out so as to stop, at least, the upper opening.

Dr. McDonald thought it a hazardous operation to attempt to lay open the tract, and he would do as Dr. O'Hagan had suggested as to treatment.

Dr. McDuffie said he would try to heal these fistulae by cauterization.

Dr. Hines concurred with Dr. Staton in his treatment, except that he would wash the fistulae with carbolic acid and employ some abdominal pressure.

REPORT OF COMMITTEE ON FINANCE.

The Finance Committee after examining the books of the Treasurer find there was a balance on hand at the last session of the Society of.....\$145 00
 Amount received at the session of Society..... 320 00
 Amount received by letter from members..... 102 40

Total.....\$567 40

Contra.

To amounts paid for publishing Transactions, postage and mailing, Secretary and Treasurer's compensation, Incidentals, &c., &c.....\$496 45

Balance in hands of Treasurer.....\$ 70 95

We recommend the same assessment as heretofore (\$2) two dollars per capita, and that the Secretary and Treasurer be paid the same salary as before.

J. W. JONES, }
 R. H. SPEIGHT, } Committee.
 JOHN McDONALD, }

Adjourned to meet at 8 o'clock.

FIRST DAY—NIGHT SESSION.

The Society was called to order at 8 o'clock, to hear the annual address by the President, Dr. J. K. Hall. The address was the nature of an essay on the *Etiology and Treatment of Typhoid Fever*.

Dr. Hall reviewed the nature of the disease as seen by him in 30 years of practice, and gave the result of his experience as to treatment.

Referred to the Committee on Publication. •

Adjourned until to-morrow morning 10 o'clock.

SECOND DAY—MORNING SESSION.

Society assembled at 10 o'clock. President, Dr. Hall, in the chair. Meeting opened with prayer by Rev. Mr. Swindell.

OBITUARY COMMITTEE.

Dr A. Holmes, of Clinton, made the report of the Obituary Committee. He regretted that he could not get the information necessary to make a full report. There had been misunderstanding, neglect or indifference, on the part of friends of deceased members, and he would ask the indulgence of the Society, to allow him to make his report directly to the Committee on Publication.

On motion of Dr. Wood it was ordered that the Committee on Obituaries be allowed time to correct, amend and amplify their report, and give it directly to the Committee on Publication.

The Conjoint Session of the North Carolina Board of Health and the Society being fixed for this hour of Wednesday morning ; owing to the absence of several members, voluntary papers were announced to be in order.

CASE OF ARTERIO-VENOUS ANEURISM OF THE POSTERIOR AURICULAR ARTERY.

Dr. Charles Duffy, Jr., read for his brother, Dr. Frank Duffy, of Newberne, the report of a case of posterior auricular aneurism, occurring in their practice. Two years previous to consulting them for the trouble, she sustained an injury in the region of the aneurism,

by falling against the edge of a door. Ferrotypes illustrating the case were presented.

Referred to the Committee on Publication.

On motion of Dr. McDuffie, Dr. Satchwell, of Pender, was permitted to read a paper on "*The Progress of the Antiseptic Treatment of Disease.*"

The paper was a lengthy review of the growth of antiseptic treatment in medicine and surgery.

Referred to the Committee on Publication.

Dr. M. L. James, of Richmond, Va., a visitor from the Medical Society of Virginia, was, on motion of Dr. O'Hagan, invited to a seat on the floor, and to a participation in the deliberations.

Dr. Thomas J. Moore introduced Dr. James as Dean of the Faculty of the College of Virginia.

Dr. James appropriately responded, giving an account of the efforts of the new political party in his State to subvert this college to their own designs and purposes. After a manful resistance the Court of Appeals decided the change attempted, to be illegal, fully substantiating the old Board. This, Dr. James considered as not only a triumph for the Medical College, but for the cause of education in the State. He closed by giving a history of the Medical College of Virginia. His remarks were greeted with applause.

COMMITTEE ON NOMINATIONS.

The President appointed the following Committee on Nominations:

Drs. N. J. Pittman, J. J. Summerell, W. C. McDuffie, George A. Foote, and H. W. Faison.

REPORT OF COMMITTEE ON CREDENTIALS.

The Committee on Credentials beg leave to submit this additional report. We find the following gentlemen qualified for membership and recommend their election:

Dr. W. N. Smith, Scotland Neck.

" N. P. Bodie, Palmyra.

" D. B. McNeill, Shalotte.

" G. C. Edwards, Hookerton.

" E. M. Summerell, Salisbury.

Dr. K. M. Ferguson, Manchester.

“ N. M. McLean, Shoe Heel.

N. J. PITTMAN,	} Committee,
C. J. O'HAGAN,	
W. H. WHITEHEAD,	

CONJOINT SESSION OF THE MEDICAL SOCIETY WITH THE NORTH
CAROLINA BOARD OF HEALTH.

The Society at 12 o'clock resolved itself into the Conjoint Session with the Board of Health.

On motion of Dr. O'Hagan, Dr. Satchwell, ex-President of the Board of Health, took his seat beside the President and presided over the meeting.

The first business in order being the election of new members, to fill the vacancy caused by the expiration of Drs. Chas. J. O'Hagan and George A. Foote.

Dr. Wood nominated DR. J. W. JONES, of Wake Forest, and DR. JOHN McDONALD, of Washington.

Other nominations were called for, but none being made, on motion of Dr. R. H. Lewis, of Raleigh, Dr. W. C. McDuffie, of Fayetteville, was requested to cast the vote of the Society for the nominees. They were declared elected.

The Secretary then read his report.

Mr. President and Gentlemen of the Medical Society :

I had hoped to report to you that the State of North Carolina had recognized the value of the work performed by the Board of Health, in these five years of our organization. But such is not my happy privilege.

At the instance of Dr. J. W. Jones, of Wake Forest, that active friend and promoter of sanitary work, indeed the prime mover of the cause in the State, a meeting was called of the Superintendents of Health, and of all interested in the advancement of public health legislation, to meet in Raleigh, early in the session of the Legislature.

Circular letters were sent throughout the State, the Board without hesitation accepting the proposition made, recognizing in it an increasing interest in their work, and being willing to aid by all means in their power any movement looking toward an improvement of our status.

The following is a copy of the letter sent out :

NORTH CAROLINA BOARD OF HEALTH,
WILMINGTON, December 18th, 1882.

Dear Doctor:—Adopting the suggestion of Dr. J. W. Jones, of Wake Forest, the State Board of Health desires to obtain a meeting of the Superintendents of Health from all the Counties in the State, if possible, and trust that you will be able to be present in Raleigh on the Second Tuesday in January.

The Legislature will then be in session, and it is desirable that the law should be so amended as to make the State Board a working organization, and that the Superintendents of Health should have better defined duties.

The State Board suggests that the following, among other items, are matters of importance to secure the continuance of the work in anything like a vigorous manner :

1. The law regarding the Record of Vital Statistics at the annual tax-listing should be amended so that some responsibility for correct returns should be put upon the tax-lister.

2. The salary of the Superintendent of Health should not be fixed, as by the present law, but left to the Boards of County Commissioners and Town Corporations.

3. Executive power should be vested in Superintendents of Health in compelling the abatement of nuisances ; the isolation of persons sick with pestilential communicable diseases ; in directing the sanitary conduct of penal and charitable county institutions, such as jails, poor-houses and houses of correction. The State Board of Health should be also entrusted with the duty of quarterly examinations of the State Capitol, Insane Asylums, Institution for the Deaf and Dumb and the Blind, and the Penitentiary.

4. Vaccination should be promptly secured by establishing a permanent department, from which vaccine could be expeditiously distributed in time of need. Modified compulsory laws should be established.

5. A modification of the rules for Coroner's Inquests should be discussed, and the conditions stated in which the Superintendent of Health, as Coroner's physician, should be expected to make *post-mortem* investigation, and a scale of fees established for the service.

6. A sufficient appropriation should be made for the expenses of the Board. Not less than \$3,000 a year would be enough to promote the work in usefulness. In addition to this, printing should be allowed the Board.

How to perfect these provisions, and how to forecast the future work of the Board, is the question which the State Board hope to hear discussed by the County Superintendents of Health. Such experience as has been gained by the gentlemen who have labored so hard to promote their County work, will be necessary to our guidance for the future.

Please favor me with a reply to this circular, and signify your intention to be present.

Should you determine not to be present, please have an interview with your representatives in regard to our needs.

Yours, very truly,

THOMAS F. WOOD,

Secretary Board of Health.

Responses came from several gentlemen, signifying their intention to be present, and from all endorsing the propriety of making an earnest and concerted effort to obtain new statutory enactment.

The following report of the meeting is given as kindly furnished by Dr. J. D. Roberts, Secretary:

RALEIGH, N. C., January 10th, 1883.

Pursuant to a call of the North Carolina State Board of Health for a meeting of the County Superintendents of Health and the State Board, there met in the Yarbrough House to-day the following gentlemen:

Drs. R. J. Noble, Selma; J. Summerell, Salisbury; J. M. Stansill, Rockingham; Isaac E. Green, Weldon; J. D. Roberts, Goldsborough; Thomas F. Wood, Wilmington; W. T. Ennett, Burgaw; G. A. Foote, Warrenton; C. Thomson, Jacksonville; J. W. Jones, Wake Forest and Prof. W. G. Simmons, Wake Forest.

At subsequent meetings the following gentlemen registered and participated in the discussions: Drs. H. Turner, Cameron, Moore County; J. F. Beall, Linwood, and J. G. Ramsay, Mt. Vernon, members of the General Assembly, and Dr. James McKee, Raleigh.

Dr. J. J. Summerell, was called to the chair, and J. D. Roberts requested to act as Secretary.

Dr. Summerell asked Dr. Wood, as being more conversant with the matter, to state the object of the meeting.

The matters for consideration by the conference were explained by the Secretary of the State Board, as follows:

The amendments required to make the present law operative, could be briefly stated. The Governor in his message called the attention of the General Assembly to the fact, that although the Constitution of the State required the formation of a BOARD OF CHARITIES AND CORRECTION, the law had not been complied with, and that practically no such Board existed. The Board of Health had been working out the problem under the law.

The following is from the Governor's message :

"STATE BOARD OF HEALTH AND BOARD OF PUBLIC CHARITIES.

"I beg to call your attention especially to the report of the Board of Health, and to ask for this organization more favorable legislation than it has heretofore received. The Board, animated by the humane desire to do something to guard the health and lives of the people, has worked for years without proper recognition from the State. It is time that something should be done in the way of pecuniary aid. I am sure they will not ask for anything unreasonable. In this connection, I desire to call your attention to Section 7, Article XI, of the Constitution, and to Chapter 94 of Battle's Revisal, on the subject of a 'Board of Public Charities.' There is not now, and has not been for years, any such Board, although it is expressly required. Such a Board could be made useful, if required to inspect our penal and charitable institutions, jails and other places where prisoners are kept confined, and make detailed reports to the General Assembly. The practical suggestion I wish to make is, that you make the State Board of Health the Board of Public Charities, and that you make a reasonable appropriation to pay the expenses of this Board when in the discharge of its public duties."

The Governor had shown a true appreciation of the service the Board of Health had rendered the State, in suggesting a coalescence of the two laws. He saw in the Board of Health the elements necessary to success, and in it a hope for the future of the constitutional requirements as regards the sanitary condition of the charitable and penal institutions of the State. The original law had been put in the hands of Dr. C. Tate Murphy, a former State Senator, and Chairman of the Board of Charities and Correction, but upon his withdrawal from the public service, the whole work had fallen into desuetude. Dr. Murphy had also been an ardent

supporter of the State Board of Health, until his failing health ended his career.

We do not forget that in the State of Massachusetts the Board of Health of that State, had been merged into the Board of Public Charities, thereby impeding the work ; but that State did not have an organization like ours. There was no good ground upon which detriment to our Board of Health could be prognosticated, by a future merging into the Board of Charities and Corrections. For was it not true that the State Board by aid of its auxiliary county boards had already taken up the work of the sanitary supervision of the jails, work-houses and poor-houses of the State? The State Board is on record in its "First Biennial Report," showing with how much care the work has been done, making a very strong and favorable contrast with the unorganized work of the Board of Charities and Corrections, until the State Board of Health had demonstrated the practical working of a dead law, so that, the North Carolina Board of Health really had nothing to fear of a coalescence which had been unconsciously in existence several years.

After this explanation by the Secretary, a committee was appointed to make a new draft of the law, incorporating the amendments proposed in the Governor's message.

The substance of the proposed law is as follows :

1. The State Board of Health to assume all the duties set forth in the law creating the Board of Charities and Corrections.
2. The composition of the Board to remain as at present.
3. The State Board to take cognizance of the health interests of the State, making all investigations necessary to obtain information about the introduction and progress of epidemics ; to be sanitary advisers of the State ; to make inspection of State institutions ; to pursue special studies appertaining to their work, and when necessary to call in the assistance of experts.
4. The members to be elected and appointed as formerly.
5. The officers of the Board to be a President, Secretary, and Treasurer, the Secretary to receive such compensation as the Board may allow.
6. The auxiliary County Boards to remain as at present, and their duties to be as prescribed by the law, and their salary to be left to the county and town authorities, but to be based upon the fees current in the county in which a Superintendent serves.
7. Directs the time of meeting of the State Board.

8. Provides for monthly reports of Superintendents to the Secretary of the State Board.

9. Refers to the conduct of inland quarantine, making the fine for its violation \$200, and enjoining upon Superintendents to give all aid in their power to the maritime quarantine.

10. Directs the process for the abatement of nuisances dangerous to the public health.

11. Provides for the proper vaccination of persons coming under the care of the State and Counties; provides for a supply of vaccine to be kept by the Secretary; and asks for \$200 for this purpose.

12. Provides for issue of Bulletins of warning, on matters appertaining to pestilential disease, and the means of preventing their spread; also provides for the circulation of information upon all topics which in the discretion of the Board affect the health interests of the people.

13. About special meetings of the Board.

14. Provides for analyses of water, food, drugs, &c., by the Agricultural Department.

15. Asking the State for \$3,000 annual appropriation, and printing, and stationery, necessary.

16. Repealing all laws conflicting with this.

The discussion of all the items entering into this bill was prolonged and earnest, and the final conclusion of the work reached, was left to the consideration of the friends of the Board in the Senate and House of Representatives.

On motion, a committee of five was appointed to re-write a bill, embodying these points, to be presented to the General Assembly for adoption. Committee: Drs. Wood, Jones, Foote, Green and Prof. W. G. Simmons.

Prof. Simmons offered a few remarks on the importance of the work of the State Board of Health.

On motion adjourned until 7½ P. M.

YARBOROUGH HOUSE—7½ P. M.

Meeting called to order by Dr. Summerell.

Dr. Wood read the report of the committee and it was discussed by Drs. Foote, McKee, Turner, and others, by sections.

Quite a discussion arose as to Sec. 11 (in regard to serving papers on owners of premises to abate nuisance) and, on motion, the section shall read as in the original bill.

After much discussion as to amount of appropriation to be asked for, the sum was finally placed at \$3,000.

On motion, adjourned until 9½ o'clock to-morrow morning.

RALEIGH, January 11th, 1883.

Meeting called to order at 10 o'clock A. M. Dr. Summerell in the chair.

On motion, the chair appointed a committee of four (two to each house) to wait on the members of the General Assembly and solicit their influence in securing the passage of this bill.

On motion, Dr. Summerell was made chairman of both committees.

To visit the Senate.—Drs. Ennett and Foote.

To visit the House.—Drs. Jones and Green.

Resolved, That the bill be entrusted to Mr. Battle of the Senate and Mr. Bunn, of the House, to introduce.

Moved by Dr. Jones that the State Board of Health, and the County Superintendents of Health meet next, at the time and place of the meeting of the State Medical Society in the year 1884.

Adjourned to meet at 1½ o'clock P. M.

At 1½ P. M. the bill was read and discussed in consultation with Senator Battle, who promised to introduce it, and work to secure its passage.

On motion, adjourned.

J. D. ROBERTS, Secretary.

J. J. SUMMERELL, Chairman.

The action of the Board and members of the Conference did not cease with adjournment, but letters were written to members supposed to have influence in the Legislature, setting forth explicitly our aims, our progress, and necessities.

Unfortunately the bill which was introduced in the Senate did not come up until adjournment was impending, and it received only seven votes out of a possible 50.

If we are to judge of the temper of the House by the assurances

made to the members of the Congress, we believe it would have been wiser to have introduced the bill in the House.

Another mistake was, that we met in Raleigh too early in the session, before the machinery had been put smoothly in motion. Furthermore we should have waited to see the bill introduced, and then to have gone before the Committee to which it was referred to present our arguments. The discussion of the bill as reported in the *News and Observer* was too silly to deserve comment, except that it shows the great necessity of indoctrinating the people with the elementary knowledge of the means of public health, and then they will demand of their Representatives a more liberal extension of our powers and means.

On the part of the Society we need more active support. Passive support, we have. But milk-and-water acquiescence does not budge a burden as great as that we have undertaken. The Board needs aggressive, untiring help. It is the only hope of success. In those counties where work has been done, we see good results. In Mecklenburg County there has been some opposition stirred up, and it was from the Representatives of that county that all organized opposition came.

In New Hanover County our work is recognized as a part of the necessary machinery for public improvement. The Board of Health has the respect and confidence of the city and county, and the Superintendent gets salary enough to enable him to devote all of his time to the work.

VITAL STATISTICS.*

The returns collected in 1881, under the law for the Registration of Vital Statistics, amounted to 346 pounds weight. Little progress was made in tabulating this mass of papers, until in last May Dr. J. D. Roberts, Superintendent of the Eastern Insane Asylum, kindly volunteered to complete the task. The report is herewith appended, and I only wish I could say of it, that it is valuable. But being the first-fruits of the law, the reports sent in were very badly made, and some of them not entitled to the slightest credence. The Board thus publicly desires to return their thanks to Dr. Roberts for his part of the work.

*Vital Statistics are omitted here and may be found in the Second Biennial Report.¹⁴

SMALL-POX VISITATIONS.

During the past year small-pox made its appearance in Wilson, Jones, Burke and New Hanover Counties.

In New Hanover County only one case appeared.

In March, the mate of a coasting schooner was received into the Marine Hospital with a slight indisposition, marked by a slight erythematosus bluish, which afterwards proved to be true pre-variculous erythema. Dr. F. W. Potter, Superintendent of Health of New Hanover County was notified, and he took immediate steps to prevent its spread.

The sick man was removed without delay to Mt. Tirza Small-Pox Hospital, four miles below the city, and visited daily. He died of the confluent disease on the 14th day.

Vaccination had a marked triumph in this case. Close examination revealed not the slightest vaccination cicatrix on the arm of the small-pox patient, while all of his vaccinated comrades escaped even the slightest sickness.

Vaccination had been so largely done in the Winter of 1881, that comparatively little of it was done, but the corporation made ample provisions for a thorough protection of every inhabitant of the county.

In April small-pox broke out in Graham and Clay Counties. Great excitement was created. Appeals came from these counties, through the Governor, for help. The letters were sent to the Board for action. The Secretary deemed it opportune to set forth to the applicants that the State had made no provision to furnish vaccine virus. That the law was practically inoperative even upon such a vital point; they could now see the necessity of attempting to urge upon their representatives some adequate action, and not leave the burden upon a Board without funds. Vaccine was promptly sent them, with a number of the pamphlets on vaccination published by the Board. Request was made at the same time that they should send a report of the source of the introduction of small-pox, and also to reply at once if the vaccine after ten days was inactive, and freely offering such assistance as their circumstances demanded.

If this case of small-pox happened in the house of the representatives of Clay and Graham, probably we may get attentive listeners when we ask for amendments.

Our old work is receiving recognition at the hands of the commercial public. In a recent report made to the Produce Exchange of Wilmington, by its President, Mr. James Sprunt, the pamphlet issued by the Board entitled "A Guide to Shipmasters," &c., was reprinted in full for the information of the Exchange, and for the purpose of calling attention of foreign vessels trading with Wilmington to the means of prevention of river fever.

Much new work has not been done, as the deficit has already exceeded \$1,000, and it was considered prudent not to incur additional expense, but report the state of affairs to this Conjoint Session of these bodies.

It remains now for you to say what shall be done for the future. No aid can be expected from the Legislature, if at all, at an earlier day than January 1885. If we vacate our position by dissolving our organization, the hope for public health work will be retarded indefinitely, and in fact there would be no prospect of reviving it, until some great epidemic disaster should overtake us. We have done too much work to throw it away. We have made ourselves felt as a useful body, and by strict economy we may be able to keep our work alive for another two years. As the executive officer of the Board, I confess freely that I know of no course we could pursue, which gives promise of better results. But still there may be some who think differently, and by making a thorough change, we might make headway. I can say for myself that I am not willing, personally, to be at more expense than I have already incurred, and if I am to continue the work for another two years, what is done, must be strictly such work as is designed to prevent the destruction of that already performed. I have no hesitation in saying, that if every county in the State had an active Board, the State Board could live and progress slowly; but most of our energy is devoted to keeping alive the auxiliary Boards. I respectfully submit that the State Board has a right to demand your active help.

At the conclusion of the report, a general discussion ensued upon the condition of the Board of Health.

Verbal statements were made by Drs. McDuffie, Duffy, Hines, Summerell, Haigh, McDonald, Foote, Holmes, Potter, Julian Baker, A. G. Carr, and Ennett.

It was elicited on discussion, that the organization of the County Boards were due in some cases

1st. To the small pay attached to an office in which there is so much work.

2d. To the semi-political influences brought to bear by the non-medical county officers, in the selection of the Superintendents and the award of pay for services.

3d. To a lack of knowledge of sanitary affairs on the part of county officials, and the people.

4th. To an indifference on the part of physicians not officially concerned, in the work of the County Superintendents.

5th. To too minute character of the reports required by the Secretary of the State Board.

On the other hand, in one or two counties where the law had been fully carried out the results were very beneficial, and the work of sanitation had been heartily endorsed by the people, and city and county authorities, and something like adequate compensation given. There was not so much a defect in the machinery of the law, as in the lack of proper appropriation for services.

The opinion of the necessity for County Boards of Health pervaded all the observations on the subject.

Dr. Wood, Secretary of the Board, concluded the discussion.

Dr. A. G. Carr, of Durham, inquired of the Secretary what was the proper way to organize a County Board of Health.

Dr. Wood replied: The essential requisite for the formation of a County Board is to have enough young, energetic, spirited doctors, who are willing to enter upon their work without prospect of reward, and to be patient with county and town officials. They must commence by informing themselves thoroughly about the law under which they were acting, and by studying perseveringly all the works on public hygiene they could find, and then indoctrinate the people with these principles. Before demanding salaries, they should set themselves to work immediately to show how necessary their organization was. If they could do this, they would find in most instances that the authorities would be liberal with them.

Dr. Wood thought that it was well to review the adaptability of the machinery of our law to the necessities of the counties. From enquiries made, it was evident that all did not understand the advantages of the law. It was very apparent from the beginning that to frame a law simply to look after the sanitary affairs of the county, would not have been entertained by the Legislature for a

moment. It became necessary, therefore, although objectionable, strictly speaking, to combine the office of public physician with that of sanitary officer. Moreover, this union of the two offices was a humane provision. For it was a well-known fact, demonstrated by Dr. Tate Murphy's extensive inspection of poor-houses and jails in many counties of the State, that the poor-houses while ostensibly asylums for the helpless poor, were as much penal institutions as the jails. That insufficient food, squalid filth, and general inattention, were fast degrading the poor wards of the county. That liberties of a shocking character between the sexes, and between the two races, was a flagrant enormity. That there was no escape from this state of things with the system of inspection in vogue at the time of the law. That visits were made to jails and poor-houses by grand juries at stated intervals, and at times when keepers of these institutions were on the lookout for them. A spasmodic attention to cleanliness was resorted to, and one case was known, where the keeper of the poor-house to make a good appearance and get official approval for his ample provision of food, stocked out his storehouse with groceries, which were returned as soon as court week was over. It seemed necessary, as well as expedient, to combine the office of sanitary manager of, and physician to the poor-houses and jails, to procure for these unfortunate people, at least merciful attention.

This, then, was the key-note of the situation. No county could get along without the aid of a physician to care for the poor and prisoners, and perform medico-legal post-mortem examination. It would be wise to engraft upon this necessity, a system of sanitary supervision, and charge the officer upon whom these functions fell with the duties of recording vital statistics.

How to work out this theory, and how to shape it so that it would carry conviction to the Legislature, was the engrossing theme five years ago, it is paramount now. That our system is a good one, we judge by the approval it has received from gentlemen who have been engaged in the work for years.

As the matter now stands, I doubt if it is legal for county authorities to employ any one to attend the penal and charitable institutions of the county, in any other way than that laid down by the Board of Health law. If this be so, then nothing is easier than to make the effort, provided that the doctors of the county will interest themselves. But here we come face to face with a great difficulty.

There is a lack of organization of very many counties. We have heard here, to-day, of the statement of the absence of societies in most counties. This must be remedied first. Personal ambition and rivalry, and apathy and laziness, must give way, and Societies and Boards of Health formed. We have an example in our State Society of what can be done by organization, and in some counties also there are exemplary societies. The work is entirely possibly. We have only ourselves to blame for not being heard in the State. Ours is an unselfish plan to better the condition of the people, and we will convince the people of it when we show the earnestness of our own convictions.

If Superintendents of health will daily attend to their records we will collect something in the aggregate of value. If they allow their observations to lay over for another day it will not be accurate. Some of the gentlemen complain that they can only give their individual observations in making the monthly reports. Of course this ought not to be so. It is culpable neglect of a public duty and a friendly office. But if it must be that monthly reports only contain the personal observations of the Superintendent, just make them as accurate as possible, and send them along. If you do not remember it let me remind you, that the printed statement of the condition of county public buildings contained in our *First Biennial Report* has caused many a miserable den of a jail to be renovated, and many a poor-house to rejoice in the luxury of a clean floor, pure air, and white-washed walls. But the statistics contained in your reports have a further value, in consideration of that other department of statistical record established by the efforts of this Board. I have mentioned in my report that there is a plan for collecting the statistics of births, and of deaths of persons dying with diseases dangerous to the public health. If this law is complied with properly, the tabulation of the material thus collected will serve to throw light upon the diseases prevalent in certain counties at certain seasons, and also show the number of deaths from the preventable diseases.

RESIGNATION.

Dr. A. G. Carr offered his resignation as Treasurer, because he had long filled the position to his own detriment. He was so much interrupted during the session of the Society that he had no opportunity to listen to the proceedings. He hoped that the nominating committee would find some one else. No action taken. .

Adjourned to meet at 3 o'clock.

SECOND DAY—AFTERNOON SESSION.

The Society was called to order at 3 o'clock. Dr. Hall, the President, in the chair.

Dr. Foote introduced the following resolution as amended by Dr. Thomas F. Wood, making provision for a conference between pharmacists and physicians:

"In consequences of the numerous fatal mistakes that have occurred in the State by the unintentional administration of poisonous medicine by physicians and druggists, and in the absence of any law on the subject; therefore, be it

Resolved by the Medical Society of North Carolina, That the druggists and physicians be earnestly requested to keep all poisonous medicines in bottles or packages of such shape and character so as to be as readily recognized by the sense of touch as well as of sight; and

Resolved furthermore, That a Committee of Conference between the Medical Society of North Carolina and the North Carolina Pharmaceutical Association be appointed to take into consideration the question at issue and cognate questions bearing upon the subject.

The President appointed Drs Potter, Thomas and Bellamy Committee.

REPORT OF THE CHAIRMAN OF THE SECTION ON MATERIA MEDICA
AND THERAPEUTICS.

Dr. Furgerson read his report as Chairman of the Committee on Materia Medica and Therapeutics.

Referred to the Committee on Publication.

RAG-WEED (AMBROSIA) AS A STYPTIC.

Dr. Thomas Hill, of Goldsborough, read a paper on the Hemostatic properties of *Rag-weed*, *Carrot-weed*, or *Ambrosia trifida*. He presented the specimen of the plant for identification as he did not claim to be botanically correct. Dr. Wood was asked to name it. He knew that it was an Ambrosia, but could not give the species without the flowering specimen.*

In conclusion of his paper, Dr. Hill remarked that he thought more attention ought to be paid to the study of indigenous plants. Many

*Since determined as *A. artemisiifolia*, *A. trifida* grows in the middle and upper sections of the State. They probably are similar in properties.

were of undoubted value, but their properties could not be ascertained except by systematic study.

Dr. Summerell confirmed the experience of Dr. Hill as to the therapeutic value of *Rag-weed* as a styptic especially in epistaxis and bleeding gums; but he did not know whether or not this property was due to the presence of tannin.

Dr. Hill's paper was referred to the Committee on Publication.

REPORT OF A CASE OF ENCYSTED OVARIAN TUMOR.

Dr. A. Holmes, of Clinton, read the report of a case on Ovarian Tumor.

On motion of Dr. O'Hagan it was referred to the Committee on Publication.

SYPHILIS.

Dr. W. C. McDuffie, of Fayetteville, read a paper on Syphilis.

On motion of Dr. McDonald it was referred to the Committee on Publication.

PATHOLOGICAL SPECIMENS.

Dr. H. B. Furgerson presented several pathological specimens, which were exhibited and discussed.

Society adjourned until 8 P. M.

SECOND DAY—NIGHT SESSION.

ANNUAL ADDRESS.

Society assembled at 8 o'clock in public session to hear the Annual Address by Dr. W. R. Wilson, of Townesville. There was a good audience composed of ladies and gentlemen, who had been invited to participate in this meeting, according to the custom. The subject of his address was "*The Right Relation of the General Public to State Preventive Medicine.*"

At every meeting of our Society for the past seven or eight years, said the speaker, we have had able reports upon State preventive medicine. Whatever of information was gained, or whatever of interest was excited was confined almost entirely to the medical pro-

fession, who alone heard the discussions or read the reports. He had more readily chosen his subject, because of the recent unfriendly action of the Legislature upon matters touching the very life of our State Board of Health.

The speaker then quoted several eminent writers to the effect, that "no sanitary improvement worth the name will be effected, whatever acts you pass or whatever powers you confer upon public officers, unless you can create a real and intelligent interest in the matter among the people at large." "They must be interested systematically in the general results of sanitary progress and become more intimately acquainted with the social and material causes by which it is impeded."

He showed how greatly the healthy condition of our homes depended upon the women, and that they should be enlightened particularly upon all that concerns the hygienics of the house from the cellar to the garret.

Dr. Wilson defined *Preventive Medicine* to mean a system of measures, the use of which tends to maintain and improve the health of individuals and communities; the addition of the word State carries with it the idea of the proper legislation to carry out these health measures.

So there was much in his subject which was beyond the purview of the doctor. He pointed out that although hygienics in this country was almost entirely in the hands of the doctor, this was only right as pertains to his offices with the sick; really this burden should not fall entirely on the doctor. He was glad to say that "some of the greatest sanitarians that ever lived and toiled for the good of their race were not professional men."

He then made a retrospective glance of sanitary science in the past, and compared it with the present.

The first ray of light upon this dark scene (referring to the devastating epidemics of the middle ages) were the discoveries of Captain Cook and Howard, and then came the great discovery of Dr. Jenner, who had saved more lives and prevented more suffering than curative treatment has in half century of its existence." But it was only within this 19th century that any persistent, systematic study of sanitation has been made, and only within the past 40 or 50 years have reasonings and deductions from well kept records assumed such a shape of proven and acknowledged facts as to acquire

and deserve the name of science ; and it is only within that time that Statesman and political economists have recognized and legalized the relations of the State to Preventive Medicine.

Eminent and competent men now declare and prove, that fully one-third of those who die, die of preventable disease, and that for every death there are twelve cases of lingering, suffering, preventable sickness. If this be so, and I believe it is so, what a sin against humanity. What a sin against Divinity. What an impeachment of the boasted civilization of the 19th century.

Dr. Wilson then reviewed the vital statistics of England and Wales in respect to the "seven zymotic diseases."

In conclusion, the speaker said: "The Legislature of North Carolina has seen fit in its wisdom to cripple the efforts of our State Board of Health, which with rare energy and enthusiasm had been carrying on its work at the sacrifice of time and money upon the part of its members. Our appeal is to you : Let Sanitary Societies be formed in every town in the State ; have frequent meetings ; see to it that in your library you have books of recent publication upon those subjects. Read the books, talk about them with your doctor, with your preacher, with your editor, with your neighbor, but especially talk to, and if necessary, *instruct* your member of the Legislature. * * * Tell him that while you want your fertilizers analyzed so that the food you give your land may not be adulterated, that you also want your food, your water, your medicine, analyzed so that the food, the drink, the medicine, you give your wife and children may also be unadulterated. * * * In a word, my friends, give this great subject that I, in my inexperience have only been able to give you a mere outline, your serious, studious consideration, assured that no subject of greater importance to society, domestic or communal could occupy your time or attention."

At the conclusion of the address, Dr. Satchwell thanked the speaker for his valuable and spirited address, and moved that it be printed.

Dr. Wood thought the speaker had done a great service to the Society, the Board of Health, and the people at large for his manly and vigorous appeal in behalf of State medicine, and that the Board of Health would at once order a large edition of this address, for it should be distributed in every household in the State.

Adjourned to meet Thursday morning at 9 o'clock.

THIRD DAY—MORNING SESSION.

Society met promptly at 9 o'clock.

Opened with prayer by the Rev. W. J. Smith.

President announced

COMMITTEE TO SELECT AN ESSAYIST.

Drs. Wm. R. Wood, W. T. Ennett, and J. R. Staton.

During the morning session this committee announced the appointment of Dr. John R. Nicholson, of Richlands, which was confirmed by the Society.

RESOLUTION OF SYMPATHY FOR DR. HUGH KELLY.

Dr. Satchwell offered the following resolution which was adopted:

WHEREAS, The Society learns with sincere sorrow that our esteemed fellow-member and war-worn veteran in the cause of medical improvement, Dr. Hugh Kelly, of Statesville, lies at home, after a long and arduous service in professional harness; prostrated with physical infirmities and afflictions that disqualify him from practice; therefore

Resolved, That in his old age, worn down by professional labors and suffering, we express our high appreciation of his virtues, worth, and labors, as a citizen and physician and our deep sympathies with him and his family, and that the Secretary be requested to forward to him a copy of this preamble and resolution with a letter of condolence in this, his day of sickness and trials.

FINAL REPORT OF COMMITTEE ON CREDENTIALS.

The Committee on Credentials beg leave to submit their final report. We find the following gentlemen qualified for membership and recommend their election:

Dr. H. T. Bass, Tarborough.

" T. S. Royster, Williamsborough.

" F. C. James, Pitt County.

N. J. PITTMAN,	} Committee.
C. J. O'HAGAN,	
W. H. WHITEHEAD,	

ARTIFICIAL LIMB.

Dr. J. W. Jones, exhibited an artificial limb (peg) made by Mr. Alfston, of Louisburg.

Dr. John McDonald examined it and pronounced it the best peg for a working man he had ever seen, and recommended it.

REPORT OF THE COMMITTEE ON NOMINATIONS.

The Committee on Nominations made the following report :

For President:

Dr. A. B. Pierce, Weldon.

Vice-Presidents:

Dr. F. W. Potter, Wilmington.

“ Geo. W. Graham, Charlotte.

“ R. Dillard, Edenton.

“ Geo. W. Long, Graham.

Treasurer:

Dr. A. G. Carr, Durham.

Secretary:

Dr. L. J. Picöt, Littleton.

Orator:

Dr. Julian M. Baker, Tarborough.

DELEGATES TO AMERICAN MEDICAL ASSOCIATION.

Dr. John McDonald, Washington.

“ A. W. Knox, Raleigh.

“ W. R. Wood, Scotland Neck.

“ Wm. T. Cheatham, Henderson.

“ J. W. McNeill, Fayetteville.

“ S. S. Satchwell, Rocky Point.

“ T. S. Burbank, Williamston.

“ Thomas Hill, Goldsborough.

“ R. F. Lewis, Lumberton.

“ D. J. Cain, Asheville.

“ W. H. Lilly, Concord.

DELEGATES TO VIRGINIA MEDICAL ASSOCIATION.

Dr. Geo. A. Foote, Warrenton.

“ W. P. Beall, Greensborough.

“ John Whitehead, Salisbury.

“ Frank Duff, Newberne.

“ I. Wellington Faison, Mt. Olive.

“ T C. Powell, Rocky Mount.

DELEGATES TO SOUTH CAROLINA MEDICAL ASSOCIATION.

- Dr. S. B. Evans, Statesville.
 " Robert Morrison, Shelby.
 " S. B. Jones, Charlotte.

COMMITTEE ON PUBLICATION.

- Dr. Thomas F. Wood, Wilmington.
 " G. G. Thomas, Wilmington.
 " L. J. Picöt, Littleton.
 " W. T. Emmett, Burgaw.

OBITUARY COMMITTEE.

- Dr. F. W. Potter, Wilmington.
 " Jas. McKee, Raleigh.
 " I. E. Green, Weldon.

BOARD OF CENSORS.

- Dr. Chas. J. O'Hagan, Greenville.
 " N. J. Pittman, Tarborough.
 " J. J. Summerell, Salisbury.

Respectfully submitted,

N. J. PITTMAN,	} Committee.
J. J. SUMMERELL,	
W. C. McDUFFIE,	
HENRY W FAISON,	

The report was received and adopted.

CHAIRMEN OF SECTIONS.

- Surgery*.—Dr. L. L. Staton, Tarborough.
Practice of Medicine.—Dr. W. P. Mercer, Toisnot.
Microscopy and Pathology.—Dr. John Whitehead, Salisbury.
Obstetrics and Gynecology.—Dr. S. B. Jones, Charlotte.
Materia Medica and Therapeutics.—Dr. J. T. Strickland, Thomasville.
Diseases of Children.—Dr. Kemp P. Battle, Jr., Chapel Hill.

RESIGNATION.

Drs. Bryan and H. Otis Hyatt offered their resignations which were accepted.

THE NAMES OF LICENTIATES OF THE BOARD OF MEDICAL EXAMINERS
TO BE PUBLISHED IN THE COUNTY PAPERS.

Dr. P. E. Hines offered the following resolution, which as amended by Dr. McDonald was adopted:

Resolved, That the President and Secretary of the Board of Examiners be authorized to publish the names of the doctors, who have passed an approved examination before the Board of Examiners, in their respective county papers for four weeks. And that the number of the Chapter and Section of the law governing the Board of Examiners be appended to each advertisement.

ANNUAL ESSAY UNAVOIDABLY OMITTED.

It was announced by Dr. Thomas F. Wood that Dr. Barringer, the Essayist, was taken sick at Goldsborough *en route* for the meeting. As the reading and discussion of his essay must be omitted, he moved that it be referred to the Committee on Publication. Adopted.

CHAIRMAN OF SECTION ON PRACTICE OF MEDICINE.

Dr. Geo. W. Long, Chairman of Section on Practice of Medicine read his report, which after discussion, was referred to the Committee on Publication.

RESOLUTION ASKING CONGRESSIONAL APPROPRIATION FOR FIRE PROOF
BUILDING FOR ARMY MEDICAL MUSEUM AND LIBRARY OF THE
SURGEON-GENERAL'S OFFICE.

WHEREAS, For many years the medical profession of this country have enjoyed the advantages of the Army Medical Museum, and the great National Medical Library known by the modest name of the "Library of the Surgeon-General's Office." We have seen this Library develop into the greatest consulting medical library of the world, giving aid to the medical scholars of this country, advancing the cause of medical learning and thereby increasing the efficiency of the profession, and furthermore giving to American medicine an honorable position abroad.

WHEREAS, This great collection is in unsafe quarters and is in danger of being destroyed by fire, and

Resolved, That we request our Representatives in Congress to give their influence to provide proper support for the Army Museum and Library, and help to secure at an early day a fire proof building for their protection and preservation, and that a Committee of three be appointed to communicate the desires of this Society in the premises.

Adopted.

The President appointed Drs. Thomas F. Wood, T. D. Haigh and Chas. Duffy, Jr., as the Committee.

SECTION ON DISEASES OF CHILDREN.

Dr. A G. Carr read his report as Chairman of the Section on Diseases of Children.

Referred to the Committee on Publication.

INSTALLATION OF PRESIDENT.

On motion of Dr. Chas. Duffy, Jr., the newly elected President, Dr. A. B. Pierce, was escorted to his seat by Drs. Duffy and O'Hagan. He was introduced by Dr. O'Hagan.

MORPHINE POISONING.

Dr. P. J. Macon read a paper on Morphine Poisoning. Referred to the Committee on Publication.

NEW MEMBERS FOR 1884.

The following new members signed the Constitution:

Dr. W W Faison, Goldsborough.	Dr. J H Scarborough, Trenton.
" W O McDowell, Scotland Neck	" N P Bodie, Palmyra.
" D R Schenck, Hillsdale.	" G C Edwards, Hookerton.
" N H Street, Pollocksville.	" E M Summerell, Salisbury.
" J A Stevens, Clinton.	" K M Ferguson, Manchester.
" T S Royster, Williamsboro'.	" D B McNeill, Shallotte.
" Isaac M Taylor, Chapel Hill.	" H T Bass, Tarborough.
" Jas M Hodges, Mt Olive.	" N M McLean, Shoe Heel.
" S H Rogers, Raleigh.	" J H Anderson, Tarborough.
" W L Hudson, Hawley's Store	" F C James, Pitt County.
" M O Bunn, Wilmington.	" J C Braswell, Whitakers.
" Oscar L Gregory, Halifax.	" G L Wimberly, Jr, Tarboro'.
" Wm H Bobbitt, Rockingham.	" B L Long, Hamilton.
" F R Harriss, Henderson.	" P J Macon, Warrenton.
" H H Whitaker, Battleboro'.	" H I Clark, Hamilton.

Recess.

AFTERNOON SESSION—THIRD DAY.

Meeting called to order by Dr. A. B. Pierce, President.

SECTION OF OBSTETRICS AND GYNÆCOLOGY.

Dr. J. M. Hadley's report as the Chairman of the Committee on Obstetrics and Gynecology having been dislocated from its place in

the programme on the second day, and he being called away during the morning session, it was referred to the Committee on Publication without reading.

TIME AND PLACE OF NEXT MEETING.

Dr. Lewis put Raleigh in nomination; Dr. Duffy put Newberne in nomination. Raleigh was selected and the third Tuesday in May next, as the time of meeting.

LOCAL COMMITTEE OF ARRANGEMENTS.

Drs. Knox, Lewis and Hines were chosen the Local Committee of Arrangements for the next meeting.

RESOLUTION OF THANKS.

Dr. H. W. Faison moved that the thanks of this Society be tendered the citizens of the town of Tarborough, and the members of Edgecombe Medical Society for the hospitable manner in which they have entertained this body.

The Society then adjourned to meet in Raleigh on the third Tuesday in May (20th) at time and place arranged by the Local Committee of Arrangements.

J. K. HALL, M.D., President.

L. JULIEN PICÖT, M.D., Secretary.



REPORT OF THE BOARD OF MEDICAL EXAMINERS.

The Board of Medical Examiners, met in Tarborough on the 14th day of May and continued in session until the night of the 17th of May. The following applicants passed their examinations successfully :

Dr. D. R. Schenck, Hillsdale, Guilford County, N. C.

“ S. H. Rogers, Raleigh.

“ H. I. Clark, Hamilton, Martin County.

“ B. L. Long, Hamilton, “ “

“ J. H. Anderson, Tarborough.

“ G. L. Wimberly, Tarborough.

“ S. T. Johnson, Tarborough.

Dr. H. H. Whitaker, Battleborough.

“ F. R. Harriss, Henderson.

“ H. B. Marriott, Battleborough.

“ J. C. Braswell, Whitakers.

“ W. W. Faison, Goldsborough.

“ N. H. Street, Pollocksville.

“ J. A. Stevens, Clinton.

“ W. O. McDowell, Scotland Neck.

“ Oscar L. Gregory, Halifax.

“ Wm. H. Bobbitt, Rockingham.

“ Wm. L. Hudson, Hawley's Store.

“ J. H. Scarborough, Trenton.

“ P. J. Macon, Warrenton.

“ Jas. M. Hodges, Mt. Olive.

“ E. G. Moore, Toisnot.

“ M. O. Bunn, Wilmington.

“ Isaac M. Taylor, Chapel Hill.

“ W. N. Smith, Scotland Neck.

“ N. P. Bodie, Palmyra.

“ D. B. McNeill, Shallotte.

“ G. C. Edwards, Hookerton.

“ E. M. Summerell, Salisbury.

“ K. M. Ferguson, Manchester.

“ N. M. McLean, Shoe Heel.

The next meeting of the Board will be held in Raleigh, on Monday before the third Tuesday in May 1884. The following is the order of examinations :

Anatomy.—Dr. P. E. Hines.

Surgery.—Dr. T. D. Haigh,

Chemistry.—Dr. Geo. L. Kirby.

Materia Medica.—Dr. Joseph Graham.

Obstetrics.—Dr. Thomas F. Wood.

Practice of Medicine.—Dr. H. T. Bahnson.

Physiology.—Dr. R. H. Lewis.

RICHARD H. LEWIS, M.D.,

Secretary *pro tem*. Board of Medical Examiners of N. C.

TARBOROUGH, N. C., May 16th 1883.

The North Carolina Board of Health adjourned on the 16th of May, 1883, to meet again upon the call of the President. The next regular meeting will take place in Raleigh on the third Tuesday in May, 1884.

M. WHITEHEAD, M.D., President.

THOMAS F. WOOD, M.D., Secretary.

REVISED ROLL OF MEMBERS IN THE ORDER IN WHICH THEY SIGNED THE CONSTITUTION.

*Those marked * were present last meeting. Marked (D) denotes death.*

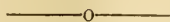
Dr. N J Pittmann,* Tarborough.	Dr. Thomas F Wood,*Wilmington
" J B Jones, Charlotte.	" Thos C Powell,* Rocky Mount.
" R B Haywood, Raleigh.	" Geo L Kirby,* Goldsborough.
" Jas A McRae, Fayetteville.	" P A Barrier, Mt Pleasant.
" Jas B Dunn, Raleigh.	" L A Stith, Wilson.
" Will G Thomas, Wilmington.	" J F Shaffner, Salem.
" S S Satchwell,* Rocky Point.	" W T Cheatham, Henderson.
" J R Mercer,* Tarborough.	" Elisha Porter, Rocky Point.
" E B Haywood, Raleigh.	" E J Haywood, Raleigh.
" A R Pierce,* Weldon.	" C R Barron, Toisnot.
" H W Faison,* Faison's Depot.	" B P Alston, Warrenton.
" Allman Holmes,* Clinton.	" J R McCorkle, Mooresville.
" E A Anderson, Wilmington.	" G G Smith, Concord.
" Hugh Kelly, Staiesville.	" D N Patterson, Mangum.
" F M Henderson, Concord.	" Joel G King, Warrenton.
" J J Summerell,* Salisbury.	" J B Sugg,* Tarborough.
" P E Hines,* Raleigh.	" H T Bahnson, Salem.
" M Whitehead, Salisbury.	" Geo N Ennett, Saunders' Store
" J G Ramsay, Rowan Mills.	" Chas Duffy, Jr,* Newberne.
" R H Winborne, Edenton.	" W W Lane, Wilmiugton.
" J K Hall,* Greensborough.	" R L Cowan, Rowan Mills.
" Geo A Foote,* Warrenton.	" R F Lewis,* Lumberton.
" Eugene Grissom, Raleigh.	" Jas S Robinson, Elizabeth.
" R L Payne, Lexington.	" W J Love, Wilmington.
" F M Rountree,* Kinston.	" J C Walker, (D) Wilmington.
" E F Ashe, Wadesborough.	" James McKee, Raleigh.
" D B Woods, Rowan Mills.	" L L Alexander, Topsail Sound
" Chas J O'Hagan,* Greenville.	" Willis Alston, Littleton.
" J W Jones,* Wake Forest.	" W J H Bellamy, Wilmington.
" J F Long, Washington.	" Geo F Lucas, Point Caswell.
" John K Ruffin, Wilson.	" Walter Brodie, Whitakers.
" C W Knight,* Tarborough.	" A S Jones, Warrenton.
" J B Hughes, Newberne.	" J L Knight,* Tarborough.
" J C Gidney, Shelby.	" C S Killebrew,* Tarborough.
" Wm R Wood,*Scotland Neck.	" W T Ennett,* Burgaw.
" J H Hicks,* Faison.	" W I Royster, Raleigh.
" M T Savage,* Scotland Neck.	" G Gillett Thomas, Wilmington

Dr. V N Seawell, Wallace.
 " Geo S Attmore, Newberne.
 " S B Flowers, Mt. Olive.
 " P W Young, Oxford.
 " John McDonald,* Washington
 " Francis Duffy, Newberne.
 " L L Staton,* Tarborough.
 " T B Germon, Ridgeway.
 " A G Carr,* Durham.
 " John A Allison, Statesville.
 " J B Gaither, Salisbury.
 " J M Hadley,* La Grange.
 " W G Johnson, Farmington.
 " W J McLinden, Wadesboro'.
 " Josh W Vick, Selma.
 " Isaac E Green, Warrenton.
 " P L Murphy, ————
 " Joseph Graham,* Charlotte.
 " J M Miller, Charlotte.
 " J L Henderson, Mt. Pleasant.
 " J R Wilson, Harris' Depot.
 " J F Miller, Goldsborough.
 " S J Alexander, Randalsburg.
 " H K DeArmand, Pineville.
 " J P McCombs, Charlotte.
 " O P Houston, Mt. Ulla.
 " S J Gilmer, Concord.
 " John Fink, Concord.
 " W H Lilly, Concord.
 " Thos J Moore,*Richmond, Va.
 " E S Foster, Louisburg.
 " A A Hill, Lexington.
 " J H Baker,* Tarborough.
 " J B Hall, Scotland Neck.
 " J M Richardson, Lincolnton.
 " T D Haigh,* Fayetteville.
 " L J Picot,* Littleton.
 " David N Sills,* Castalia.
 " John A Drake, Battleborough
 " W C Murphy*S'h Washingt'n
 " W J Cooke, Louisburg.
 " E J Thorpe,* Roeky Mount.
 " D W Bulluck,* Whitaker's.
 " W H Whitehead,* Battleboro'
 " C W Eagles,* Sparta.
 " R A Sills,* Nashville.
 " R H Speight,* Tarborough.
 " C E Moore, Battleborough.
 " H G Land Poplar Branch.
 " R J Grimes, Robersonville
 " W C McDuffie,* Fayetteville.
 " B W Robinson, Fayetteville.
 " P S Peteway, Enfield.
 " Henry Tull, Kinston.
 " A V Budd, Egypt.
 " R R Robeson, Kyles' Landing
 " W A Murdock, Mt. Ulla.
 " Jas W McNeill, Fayetteville.
 " J D McMillan, Lumberton.

Dr. W H McKinnon, Fayetteville.
 " Jos Hollingsworth, Mt Airy.
 " Robt W Glenn, Greensborough
 " Beverly Jones, Forsythe Co.
 " Nat S Henderson, Pelham.
 " Jeff Scales, Staten Island, N.Y
 " Geo W Long,* Graham.
 " Richard H. Lewis,* Raleigh.
 " Geo W Graham, Charlotte.
 " Preston Roan, (D) Winston.
 " J D Roberts, Goldsborough.
 " L H Hill, Germantown.
 " W W Wilhelm, Mooreville.
 " W R Wllson,* Townesville.
 " E Nelson Booker, Leachburg.
 " N S Siewers, Salem.
 " L G Hunt, Huntsville.
 " Jas E Griffith, Clemmons ville.
 " W P Mallett, Chapel Hill.
 " H M Alford, Greensborough.
 " F W Potter,* Wilmington.
 " J F Harrell, Whiteville.
 " W P Exum,* Wayne County.
 " D Stuart Lyon, High Point.
 " A M Lee, Clinton.
 " J R McClelland,* Mooresville.
 " Richard J Noble, Selma.
 " Wm H H Cobb, Goldsborough
 " J H Tucker, Henderson.
 " C G Bryant, Rich Square.
 " E H Hornaday,* Willow Green
 " Paul B Barringer, Charlotte.
 " I Wellington Faison,* Mt Olive
 " John A Pollock, Kinston.
 " A W Knox,* Raleigh.
 " John W Smith, Reidsville.
 " C C Peacock, Wilson.
 " D A Cheek, Greensborough.
 " J A McLean, McLeansville.
 " J G Ector, Friendship.
 " Hubert Haywood, Raleigh.
 " J M Covington, Rockingham.
 " W R Hollingsworth, Mt Airy.
 " O P Robinson, Arkansas.
 " C E Bradsher, Hurdle's Mills.
 " R W Thomas, Thomasville.
 " S W Stevenson, Mooresville.
 " H T Trantham, Salisbury.
 " W P Beall, Greensborough.
 " W A Coble, Brick Church.
 " A D McDonald, Wilmington.
 " S R Jones, Charlotte.
 " C M Glenn, Greensborough.
 " Joseph J Cox, New Garden.
 " D M Prince, Laurel Hill.
 " J A Sexton, Raleigh.
 " S B Evans, Statesville,
 " N McJohnston, Durham.
 " J T Sledge,* Greenville.

- Dr. R H Hargrove,* Robersonville.
 " J T Winston, Youngsville.
 " C A Swindell, Greenville.
 " W L Abernethy, Hickory.
 " John Chapel Walton, —
 " J M Tomlinson, Bush Hill.
 " Julian M Baker,* Tarborough.
 " T E Balsley, Greensborough.
 " J L Gunn, Yanceyville.
 " Thos E Anderson, Statesville.
 " Richard Dillard, Jr,*Edenton.
 " V St Clair McNider, Jackson.
 " L M Powers,* Plymouth.
 " W C Galloway,* Snow Hill.
 " K J Powers, Camera, Pender co.
 " J McQ Stansill, Rockingham.
 " J T Schonwald, Wilmington.
 " R H Adams, Gastonia.
 " L W Hunter,* Charlotte.
 " W W K Anders,* Gravel Hill.
 " M W Hill, Statesville.
 " E T Speed,* Tarborough.
 " L Hussey, Warsaw.
 " W P Mercer,* Toisnot.
 " H S Noreom, Wilmington.
 " Ed De La R King, Goldsboro'.
 " S J Montague, Winston.
 " J L Nicholson,* Richlands.
 " John Whitehead,* Salisbury.
 " T W Harris, Chapel Hill.
 " H T Ivy, Fayetteville.
 " A B Huntley, Wadesborough.
 " D B Frontis, Lexington.
 " J A Collins,* Enfield.
 " C M Pool,* Salisbury.
 " John Irwin, Villa Franea.
 " Geo H West, Newton.
 " G E Matthews,* Ringwood.
 " T S Burbank,* Williamston.
 " Thomas Hill,* Goldsborough.
 " J C Shepard, Scott's Hill,
 " R A Hauser, Bethania.
 " B F Whiteside, Hickory.
 " Percy T Norcop, Asheville.
 " S P Waldo, Cary.
 " Wm L Crump, South River.
 " D J Cain, Asheville.
 " M D Phillips, Dalton.
 " John G Hardy, Asheville.
 " J M Lyle, Franklin.
 " J A Reagan, Weaverville.
 " R S Baynes, Bushy Fork.
 " F Broyles, Asheville.
 " T R Robertson, Neuse.
 " H W Lilly, Fayetteville.
 " G W Fletcher Shufordville.
 " S H Lyle, Franklin.
 " J Anderson, Calahan.
 " E Crowell, Lincolnton,
- Dr. R J Wilson, Swannanoa.
 " M H Fletcher, Shufordville.
 " Thos M Jordan,* Hillsborough.
 " W L Hilliard, Asheville.
 " C Winston, Franklinton.
 " T A Crowell, Monroe.
 " R L Payne, Jr, Lexington.
 " T F Meisenheimer, Big Lick.
 " W C Brownson, Asheville.
 " T F Pharr, Concord.
 " H W Betts, (D) Albemarle.
 " W D Hilliard, Asheville.
 " J W Moose, Mt. Pleasant.
 " A D Pair, Eagle Rock.
 " J K Gilkey, Marion.
 " J H Faison, Faison.
 " W L Reagan, Ivy.
 " H B Weaver, Weaverville.
 " J C Craigmiles, Marshall.
 " A J Battle,* Earpsborough.
 " J R Staton,* Tarborough.
 " R S Lacky, Amity Hill.
 " John H Williams, Asheville.
 " C W Woolen, Randlemann's.
 " W A Woolen, Randlemann's.
 " J R Irwin,* Alexandriana.
 " A R Wilson, Greensborough.
 " K P Battle, Jr, Chapel Hill.
 " Henry B Ferguson,* Halifax.
 " J T Strickland,* Thomasville.
 " J B Gunter,* Durham.
 " Geo S Lloyd,* Tarborough.
 " R S Young, Matthews.
 " Wm G Bradshaw, Lexington.
 " Geo A Smith, Princeton.
 " C A Meisenheimer, Mt Pleasant
 " M C Hunter,* Huntersville.
 " W P Whittington, Burnsville.
 " C F Anderson, Mocksville.
 " J J Clingman, Huntsville.
 " W W Faison, Goldsborough.
 " W O McDowell, Scotland Neck
 " D R Schenek, Hillsdale.
 " N H Street, Pollocksville.
 " J A Stevens, Clinton.
 " T S Royster, Williamsboro'.
 " Isaac M Taylor, Chapel Hill.
 " Jas M Hodges, Mt Olive.
 " S H Rogers, Raleigh.
 " W L Hudson, Hawley's Store
 " M O Bunn, Wilmington.
 " Oscar L Gregory, Halifax.
 " Wm H Bobbitt, Rockingham.
 " F R Harriess, Henderson.
 " H H Whitaker, Battleboro'.
 " J H Scarborough, Trenton.
 " N P Bodie, Palmyra.
 " G C Edwards, Hookerton.
 " E M Summerell, Salisbury.

Dr. K M Ferguson, Manchester.	Dr. J C Braswell, Whitakers.
" D B McNeill, Shallotte.	" G L Wimberly, Jr, Tarboro'.
" H T Bass, Tarborough.	" B L Long, Hamilton.
" N M McLean, Shoe Heel.	" P J Maeon, Warrenton.
" J H Anderson, Tarborough.	" H I Clark, Hamilton.
" F C James, Pitt County.	



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" F D Lente, Cold Springs, N.Y.	

A WORD FROM THE EDITOR ON BUSINESS.

The Editor regrets that at the meeting of the Society in Tarborough his time was so much occupied that he could not properly attend to the business of the JOURNAL. There were many gentlemen present who owed for subscription and signified their intention to pay; but for the above reasons did not have the opportunity. The Editor asks the attention of subscribers to this matter, as remittances at this time are especially needed.

The JOURNAL comes out in this issue in a full dress of new type which we trust our friends will appreciate.

NORTH CAROLINA MEDICAL JOURNAL.

THOMAS F. WOOD, M. D., Editor.

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ORIGINAL LECTURES.

FRACTURE OF THE SKULL.

Clinical Lecture Delivered at the University Hospital, May 7, 1883.

By J. EDWIN MICHAEL, M.D.,

Professor of Anatomy and Clinical Surgery in the University of
Maryland.

GENTLEMEN:—I propose, to-day, to make some remarks upon a case which most of you have seen, but which I cannot formally bring before you on account of the fact that the patient is dead. Nevertheless, as you visited him in the ward and know the circumstances of his trouble you will be able to draw some information from a consideration of his case somewhat in detail.

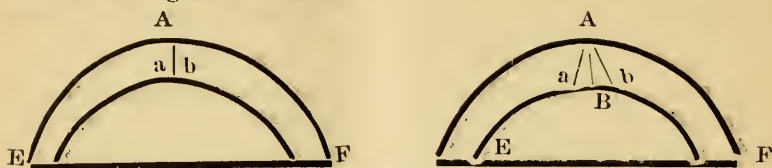
The patient, a vigorous muscular man, aged 38, was a car driver and on account of some domestic trouble determined to put an end to his life. He carried out his design very effectively but in a way somewhat out of the general run. A heavy hammer with a short handle is carried on all the street cars for the purpose of fixing the "hose jumpers" in case of fire. Having finished up all his work in a perfectly systematic manner, after the last trip for the

night, our patient reentered the car, and taking the hammer above described in both hands beat in his own skull. When found he was lying on his back in the car still striking at his head, in fact it was the noise made by the blows of the hammer on the car floor that directed attention to him. He was first seen by Dr. Pole who found this piece of bone which I hold in my hand (and about which I shall presently have something to say) lying loose in the wound. When he entered the hospital his condition was as follows : Respiration normal, pulse 50, tolerably full, all parts of the body retained sensation as evinced by movements of the patient when they were pinched; there was no discoverable paralysis; pupils normal and responsive to light; skin cool and moist. The patient upon being shaken or spoken to in a loud voice would open his eyes but would not speak; there was no groaning or other expression of pain. Within the first few hours of his stay he passed water in bed. There was no dribbling of urine. At the region of the left frontal bos there was a large ragged wound about an inch and a half in diameter in the neighborhood of which were bits of brain substance and the whole wound was filled with a protruding mass of brain. No other lesion was to be seen. The edges of the bone wound were not depressed and there was no hemorrhage of moment. There were no indications for treatment and none was used except a light sprinkling with iodoform and pad of oakum for the wound. The patient never rallied but grew gradually weaker and weaker and died quietly about fifty-five hours after the infliction of the wound. Unfortunately, no post mortem examination was allowed and so we must study the case purely from the clinical point of view. In the first place let us see what information we can draw from the piece of bone which was removed from the wound. You see that it is irregularly circular varying in diameter from an inch to an inch and a half, and that the two opposite edges present very marked differences. At one margin we see the inner table extends much beyond the outer, while on the other the reverse is to some extent true, while on the margins between these two extreme points these two conditions gradually merge into each other, the portion with excess of inner table being rather the larger. Now, the poll of the hammer with which this injury was inflicted is perfectly flat and if its surface had been applied evenly to the plane of the surface of the skull at the point of impact these irregularities could not have occurred, but we would

have had a piece of bone with excess of inner table in all its margins, following the rule that the opening of exit is always larger than that of entrance. We may here conclude from this piece of bone, that the blow which broke it out was delivered not with the flat surface of the pole, but with the edge of it, and that the margin with excess of inner table was broken first; the fracture continuing around the other margins by the continued force of the blow. The differences in the margins of the bevel are, therefore, of importance as showing the differences in the mechanism of their production.

The surfaces of this fragment also show us something of interest in connection with the mechanism of certain fractures of the skull. If you will look carefully at these surfaces, you will observe that while the external is smooth and free from fracture, there are several irregular fissures on the internal. In order to study this condition profitably, we must consider the structure of the cranial vault from two points of view. First, the composition of the wall. It is very simple. Externally we find tough, fibrous, compact bone, known as external table; beneath this, cancellated bone-tissue known as *diploë*; internally a compact brittle layer known as the internal or vitreous table. Secondly, the shape of the vault. We may say roughly, it is an irregular ovoid. The structure is elastic. If we throw a skull down on a hard surface it will rebound. This means that the ovoid may change its shape somewhat under pressure and resume it again when the pressure is removed; and it is this quality which saves our central nervous organs from many a shock which would otherwise be fatal. This elasticity serves to disperse and distribute the shock. Fracture by *contre coup* is also explained by it. In order to understand fracture of the inner table where the outer is left intact we must consider the effect of these modifications in the shape of the ovoid upon that portion of the skull-wall immediately under the point of impact. Sometimes an illustration from daily life will be more impressive than a great deal of scientific demonstration. Where you break a stick over your knees, you represent the conditions for this kind of fracture. The point where your knee presses on the stick is the point of impact, and that surface of the stick opposite the point of impact breaks first. To be more scientific, the line of pressure must represent the radius of a circle with the centre at the point of impact and the circumference at the surface of the inner

table. Change of relation in the particles which make up the wall must be greater at the circumference than at the centre in proportion to the length of the radius.



Thus in the figure let a, b , be two points immediately in contact with the line of pressure A, B . Where pressure is sufficient to cause lengthening of the base E, F , the separation of the points a and b will be in proportion to the length of the radius A, B . And these changes of relation coupled with the brittleness of the inner table show why we see sometimes a fracture of the inner table while the external table is intact. We may have also fracture of the external table without the internal being involved, as is sometimes shown where the blow is given with an edged tool or something which presents only a small surface such as will break all the external table before the elasticity of the skull can be brought into play.

It is impossible to say in one case how much damage was done to the brain. The loss of a certain amount of brain substance is not always a fatal injury. Many cases have been reported in which considerable portions of the brain have been lost and the patients, nevertheless, recovered. It is, in fact, only a few weeks since a case was treated in this hospital, in which, from gunshot wound of the fronto-temporal region, there was distinct loss of brain followed by recovery. But in our case there is no telling how far the pole of the hammer penetrated, or the piece of bone I have shown you was driven into the hemisphere. There were, it is true, no signs of fracture of the base but even without fracture there may have been very grave damage done to the basilar part of the brain. The presentation of brain substance at the wound was not what was described as *hernia cerebri* though that name might well be applied to it. *Hernia cerebri* is an inflammatory protrusion which occurs sometimes after the infliction of the injury. I have only to add how much I regret that we were not allowed to study this interesting case post mortem.

ARTERIO-VENOUS ANEURISM OF THE POSTERIOR AURICULAR ARTERY.

Read before the Medical Society of North Carolina at Tarborough,
N. C., May 16th, 1883.

By FRANK DUFFY, M.D., Newberne.

Mary Fulcher, colored, æt. about 30 years, is the subject of an arterio-venous aneurism in the region of the left ear. She first consulted us on account of this trouble about six or seven years ago. The situation of the posterior auricular artery, immediately behind the ear, presented an irregular, tortuous tumor, about the size of a turkey egg, the appearance of which is tolerably well shown in its anterior and posterior aspects by the accompanying ferrotypes. The mass pulsated clearly and was pronounced aneurism of the posterior auricular artery.

The patient said she first observed the swelling about five or six years before consulting us. About two years before she sustained an injury to the region of the subsequent aneurism by falling against the edge of a door. That accident is believed to be the cause of the aneurism. She has been married about twelve years and during that time has borne six children. This fact is noted as the conditions of the blood-vessels incident to pregnancy and the increased strain upon them at the time of labor, likely, has some pathological connection with the development of the aneurism. The woman is tall and robust; has been accustomed to do housework and to work in the fields. When we first saw this woman and sent her to the artist, we proposed to do some operation for the cure of the aneurism and instructed her to prepare for it and return soon—that she failed to do and we lost sight of her during several years. At last, seeing her by accident, the tumor was again examined and found to have very much increased in extent and size. Both the arteries and veins of the region were enlarged and tortuous. Behind the pinna and under the integument of its posterior surface was a large pulsating cavity. In front of the tragus was another cavity not so large. This, corresponding to the situation of the temporal artery. The most of the surface of the pinna was distended and pulsating. The fossa of the helix presented a distension into which the finger might have

passed. The external jugular vein was two or two and a half inches in circumference. The woman was informed that it was only a question of time when the tumor would rupture and was instructed to catch and hold the rent, in case of emergency until surgical assistance could be obtained.

On the second day of July, 1882, the place pained very much and the next night the tumor bursted. The woman roused her sleeping husband by screaming out that she was bleeding to death, which indeed, was rapidly occurring. The man soon seized the bleeding point and stayed the flow. This was kept up, one person relieving another, until next morning when we (C. and F. Duffy) visited her. We found that she had lost very much blood but still had enough left to serve the purposes of life, provided we could prevent further loss.

The common carotid was tied very low down for fear that the upper portion of the artery was diseased and would not become occluded by the ligature. The ligature was not tightened until the artery was known to pulsate between it and the finger. While doing the operation I cut a vein close to the trunk of the jugular vein from which a fearful hæmorrhage started, but was soon arrested by ligation, taking up barely enough to serve the purpose. The sac of the aneurism was now relieved from pressure and freed of dressings where blood was found to flow freely through the rent in the sac although the artery was tied. A harelip pin was then passed deeply through the edges of the opening and the rent brought together with a figure 8 suture which stopped the flow. Pieces of lint moistened in Monsels solution were laid over the part and packing adjusted to the outer surface of the mass, then a firm compress bandage carried over it and around the head. All bleeding was for the time completely arrested, and the woman put to bed and instructed to keep as quiet as possible and on no account to raise her head. The ligation of the carotid did not completely stop the pulsation in the aneurism though it was rendered very feeble. After a few days the bandage was removed, and the pieces of lint carefully soaked off with hot water. The skin was ulcerated in several spots and seemed likely to perforate the cavity. The compression was discontinued and the ulcers dressed with weak carbolic lotion, sometimes with balsam Peru. Notwithstanding the hot weather the little sloughs separated without quite opening the cavity and soon the holes began to fill up

and to skin over. Such a result could scarcely have occurred under the circumstances but for the healthfulness of the subject and the extreme vascularity of the parts. After a few weeks the blood broke through again at a new point where the wall was very thin. Again the bystanders caught the bleeding point and applied some solution of persulphate of iron. This time not having so much trouble in stopping the flow. The place was not disturbed for several days, then the dressings were removed without causing hæmorrhage. It was now evident that something more had to be done to save the woman's life, and the question was, what?

I have omitted to state in the proper order that the small ligature came away from the vein on the ninth day, leaving it occluded, and the ligature on the carotid came away on the twenty-second day with like result.

The wound made in ligating the artery, healed well without any unusual result. After all this, still the tumor pulsated, and the blood broke through a second time.

We were very undecided as to what course to take. At first we thought of laying open the sac freely and tying the vessels that fed the part, stopping some of them with the actual canterly, if necessary; but that would have left a large suppurating cavity in a dangerous locality. To inject with styptics was dangerous.

Bryant reports a case in which death occurred in a few minutes from a clot which floated out into the general circulation and caused embolism of the brain. To avoid such a result we took small pieces of dry compressed sponge and closely packed the surface all around the tumor and secured these with a cloth bandage. Over this we wound around the head and under the jaws, 5 yards of garter elastic drawing it tight. These appliances were arranged so as to leave the centre of the tumor exposed. We then injected a hypodermic syringe full of persulphate of iron solution in the sac, making two punctures. We held the points of puncture until the blood stopped there being a strong tendency to the escape of the fluid injected. The patient bore the elastic bandage about two hours when it was removed leaving the sponges which were moistened under the cloth bandage, by these a gentler compression was kept up several days.

There was no inconvenience from the injection further than a little sloughing at the point of puncture which had the appearance of dry gangrene. The tumor was very nearly completely consolidated

and soon began to shrink. After the throwing off of the slough the holes were slow in filling up, but there was no more hemorrhage and now the parts are completely healed over and of almost natural appearance.

The whole of the old tumor is not quite obliterated. There is still a small fluid portion with a little pulsation, which will require another operation for its complete cure.

After ligation of the common carotid there was considerable cerebral disturbance seeming to threaten necrosis of the brain. For a long time she complained of pain in the head and of giddiness.

She was then sleepless at night and melancholy when the prospect of recovery might have cheered her. She was put upon a course of generous diet with iron tonics and advised to busy herself with some light occupation and is now about in her normal condition.



ANNUAL ADDRESS.

Delivered Before the Medical Society of North Carolina at Tarborough, N. C., May 16th, 1883.

By W. R. WILSON, M.D., Townesville, N. C.



Mr. President, Ladies and Gentlemen :

At every meeting of our Society for the past seven or eight years, we have had able and interesting discussions, essays, and reports upon State Preventive Medicine. Whatever of information was gained or whatever of interest was excited was confined almost entirely to the medical profession, who alone heard the discussions or read the reports. Distrustful of my powers, yet animated by a sincere desire to do what little I can, nay, to do as much as I can, to advance this great cause of our own State, I have chosen as the subject of my address, to-night "The Right Relation of the General Public to State Preventive Medicine," and I am the more readily induced to take this subject because of the recent unfriendly action of the State Legislature upon matters touching the very life of our State Board of Health.

No real progress in sanitary reform can be hoped for without the intelligent coöperation of the people. Says Lord Derby: "No sanitary improvement worth the name will be effected whatever acts you pass or whatever powers you confer upon public officers, unless you can create a real and intelligent interest in the matter among the people at large." Says George Wilson in handbook of Hygiene: "The time has gone by when people can be dragooned into cleanliness or be made virtuous by police regulations and hence it is that the most thoughtful among practical reformers of the present day base their hopes of sanitary progress on the education of the masses as the real ground work of national health. The people must be taught that good conduct, personal cleanliness, and the avoidance of excesses are the first principles of health preservation, that mental and physical training must go hand in hand in the rearing and guidance of youth. They must be interested systematically in the general results of sanitary progress and become more intimately acquainted with the social and material causes by which it is impeded."

Says Dr. B. W. Richardson in his address on the Future of Sanitary Science in 1877, "I want strongly to enforce that it is upon the women on whom full sanitary light requires first to fall. Health in the home is health everywhere; elsewhere it has no abiding place, I have been brought by experience to the conclusion that the whole future progress of the sanitary movement rests for permanent and executive support on the women of the country. When, as a physician, I enter a house where there is a contagious disease, I am, of course, primarily impressed by the type of the disease, by the age, strength and condition of the sick person. From the observations made on these points I form a judgment of the probable course and termination of the disease and at one time I thought such observations sufficient—now I know them to be but partly sufficient. A glance at the appointments and arrangement and management of the house is now necessary to make perfect the judgment. By this glance is detected what aid the physician may expect in keeping the sick in condition most favorable for escape from death and by this is also detected what are the chances that the affection will be confined to one sufferer or be distributed to many.

"As a rule to which there are the fewest exceptions, the character of the judgment is hereupon dependent on the character of the presiding genius of the house, on the woman who rules over that small domain.

The men of the house come and go, knows little of the ins and outs of anything domestic, are guided by what they are told and are practically of no assistance whatever. The women are conversant with every nook of the dwelling, from basement to roof, and on their knowledge, wisdom and skill the physician rests his hopes. How important then, how vital that they shall learn as a part of their earliest duties the choicest sanitary code."

By Preventive Medicine we mean a system of measures, the use of which tends to maintain and improve the health of individuals and communities, the addition of the word State carries with it the idea of the proper legislation to carry out those health measures. Thus by this simple definition you will see at once that there is much in our subject beyond the purview of the doctor. Generally in our country everything pertaining to health or sickness is left entirely in the hands of the medical profession and in the presence of actual disease this is right and proper and the physician should require absolute and implicit obedience to his prescriptions but in Preventive Medicine as above defined, while he may advise, nay, may lead, yet after all the people by a study of the laws of health, and by taking precautions and means to carry out those laws must be their own saviours from preventable disease and premature death, and right here, I am glad to say, that some of the greatest sanitarians that ever lived and toiled for the good of their race were not professional men.

Captain Cook, the renowned navigator, while seeking fame in geographical discoveries made himself not famous in the sense in which we generally use that word, but a *blessing* to mankind by his discovery that scurvy could not only be cured but prevented by vegetable food, so that dread disease which killed more English seamen than "tempest or battle" has really been banished from our list of diseases and only now, at rare intervals, reappears as the result of gross ignorance or carelessness. In the same century, the good and philanthropic Howard, when misfortune had as much agency as crime in filling English prisons proved the genesis of typhus fever to be in the poisoned and poisonous air and accumulated filth of those cells, a discovery which enabled Mr. Chadwick to say a year or two ago in speaking of the triumphs of Preventive Medicine "that in prisons and places under effective sanitary control the death-rates (from disease) have been reduced among persons of school ages and

upwards to about 3 in 1000," that is, that in London, which has a good sanitary record, among the institutions subject to absolute hygienic control, the death rate is about 1-7th of what obtains among those who inhabit their own castles and work their own sweet wills. In our own country, in 1850, Lemuel Shattuck, of Boston, was the author of a report on Sanitation, which, though little heeded at the time, yet bore fruit twenty years after in the establishment of the Massachusetts State Board of Health, the first organized effort in this direction in the United States.

Sanitary science is not a thing of to-day. Let us take a brief retrospective glance at its workings in the past. Then let us look at its present status with its aims and ambitions for the future and then let us honestly inquire what relation as good citizens and as philanthropists, we sustain to this great cause.

In the history and traditions of ancient peoples we find traces more or less of its influences. In all times the study of the causation of disease must have suggested to the mind of the student the removal or avoidance of those causes. Some work was done in this direction centuries ago, especially among those three great nations of antiquity the Jews, the Greeks and the Romans, who in turn have impressed their peculiar civilization upon the world. Under the Theocracy the laws pertaining to the religious life of the Jew were paramount, subservient to these laws were, all his civil and domestic relation, hence the countless purifications, washings and baptizings which, while symbolizing the purity which should characterize his religion, yet, also secured the cleanliness of his person, his raiment and his abode. By their isolation from other peoples the first great quarantine law and by the environments of the ceremonial law, by the education, physical as well as moral, forced upon them by the daily, nay hourly requirements of that law, racial development made them a distinct, peculiar people and their acquired heredity gives at this day, even after the lapse of centuries "an illustration of health and vigor, of longevity, of general freedom from disease, and destructive plagues, and great powers of reproduction under adverse circumstances."—H. Clark, Report of Rhode Island State Board of Health.

The Greeks and the Romans have left indubitable evidences in history and tradition and in the remains of their cities and dwellings of the value they placed upon sanitary surroundings but their care

in this respect is chiefly noticeable in the great interest taken in physical culture and in at least one of the Grecian States the doctrine of the "Survival of the Fittest" was proclaimed not by "Natural Selection" but by the unnatural devotion of the lame, the blind, the physically weak to premature death.

From the fall of the Roman Empire on through the Middle Ages is but a dreary and sickening record of disastrous and oft recurring epidemics, claiming their victims by the tens and hundred of thousands potent factors in the fall and extinction of nationalities and dynasties.

The age of chivalry was also the age of superstition and ignorance and dirt. To the Monk was relegated the care of bodies as well as of souls, and "while the preacher of Righteousness he was also an illustration of personal filth." During all these centuries of devastating diseases there was no recognition of removable or avoidable physical causes, but an apathetic, superstitious submission to them as of Divine appointment, an horrible imputation upon that Good Being who rejoices neither in the death of the body or the souls of the creatures of His hand.

The first rays of light upon this dark scene were the discoveries of Cook and Howard already alluded to and then came the great Dr. Jenner, who, by the discovery of vaccination, has saved more lives, and prevented more suffering, than curative treatment has in any half century of its existence.

But it has only been within this nineteenth century that any persistent, systematic study of sanitation has been made and only within the past 40 or 50 years have reasonings and deductions from well kept records assumed such a shape of proven and acknowledged facts as to acquire and deserve the name of Science, and it is only within that time that statesmen and political economists have recognized and legalized the relations of the State to Preventive Medicine. Eminent and competent men now declare and prove that fully one-third of those who die, die of preventable disease and that for every death there are twelve cases of lingering, suffering, preventable sickness.

If this be so, and I believe it is so, what a sin against humanity; what a sin against Divinity; what an impeachment of the boasted civilization of the nineteenth century. But as intimated a brighter day has dawned. Governments, statesmen, and political economists

are beginning to appreciate and act upon the results of the labors of physicians and sanitarians. They have had forced upon them the fact that a great proportion of the sickness afflicting any country is preventable. They see that the same line of argument which forces State interference in the punishment of crime in forcing the observance of civil contracts in the matter of education, in providing and overseeing great lines of transportation also urge State interference in the transgression of sanitary law. It is true, that the ground work of true sanitation is in the homes of the people. That upon the proper domestic regulations of each household in regard to those great essentials of good health, viz: pure air, pure water, good food and a plenty of each with cleanliness of person and household depends the health of the family, of the community, of the State, for a community or a State is but an aggregation of such homes. To secure this great good, certain sanitary laws must be complied with else sure penalty will come in shape of disease and death and unhappily not confined to the original transgressor. But what laws are not violated?

The violations of the criminal law erects the gibbet, the guillotine and the penitentiary. The violations of the civil law consumes the life time of legislatures in imposing and of judges in executing penalties. The State must interfere and interpose these checks.

So in the violation of the laws of health the individual cannot protect himself or his family against those causes of disease set in motion by the ignorance or neglect, or carelessness of his neighbor. As an instance take small-pox. If anything ever has been proven, the fact that true vaccination protects against small-pox must be admitted, yet only last year, when that disease was declared epidemic in our capital city, Dr. Knox tells us that over three thousand people in the capital of our State, refused to be vaccinated thus in their ignorance and recklessness not only rejecting protection for themselves but in hourly danger of becoming the means of spreading the disease among others.

But what is the present status of Preventive Medicine? Happily for us a great government has nobly identified herself with the grand cause. In England sanitary laws are among those best executed in the land. Other European countries have fallen into line and the health department of the different governments takes its proper rank and in our own country twenty-seven States have Boards of Health.

Some of these Boards by aid of appreciative Legislatures are doing noble work, others, I am sorry to say, ours among them, in their annual reports have chiefly to tell of work they want to do and of the whiteness of the harvest with paucity of laborers and means. But as before said, it is under English auspices and upon English homes that State Preventive Medicine sheds its richest blessing.

As instances of its beneficent action and as triumphs of the execution of its precepts, we can to-day say that scurvy, leprosy and the plague have ceased their scourges, that vaccination has added three years to the expectancy of human life, and that Asiatic cholera, that dread traveller, upon all highways of commerce leading from the East to the West, almost invariably yields to preventive measures in its formative stage, but as a clearer demonstration of the value of preventive measures, I here quote Edwin Chadwick, the veteran sanitarian of England in his Health Report for 1880. Says he: "Before concluding the part of our report which relates to sanitary administration, it may be useful to draw attention to the annual death-rate for some years past, as indicating the effect which recent sanitary measures would appear to have had upon the public health.

The following table shows the death-rate for each of the four last decennial periods:

ENGLAND AND WALES.

ANNUAL DEATH-RATE PER 1000.	1841-50.	1851-60.	1861-70.	1871-80.
All Causes.....	22.4	22.2	22.5	21.5
Seven Zymotic Diseases.....	4.11	4.14	3.36
Fever.....	0.91	0.88	0.49

" " From the above figures it will be seen that, speaking generally, the death-rate of the country remained stationary from 1840 to 1870, but that in the period 1871-1880 it fell from 22.5 (of the previous decade) to 21.5, a reduction equivalent to nearly $4\frac{1}{2}$ per cent. It may therefore, be roughly estimated that about a quarter of a million of persons were saved from death in the ten years 1871-80, who would have died if the death-rate had been the same as in the previous thirty years. If twelve cases of serious but non-fatal illness be reckoned for every death, it follows that about 3,000,000 persons, or over one-ninth of the whole population, have been saved from a

sick-bed by some influences at work in the past decade, which had not been in operation previously. The case, indeed, is still stronger than this. The death-rate of rural districts is habitually lower than that of urban districts; and as the population is steadily concentrating itself, more and more, into the towns, the death-rate of the whole country would tend to increase, if the other circumstances affecting it remained counteracted, it becomes interesting to see where the gain has been, and to endeavor to trace some of the causes to which it may be due.

“ ‘ Comparing, then, 1861–70 with 1871–80, it will be seen from the foregoing figures that of the entire reduction of 1.0 in the death-rate, more than three-quarters ($4.14 - 3.36 = 0.78$) comes under the head of ‘The Seven Zymotic Diseases;’ of the diseases, that is, which are most influenced by sanitary improvements, and most amenable to control by the action of sanitary authorities. And of this three-quarters, just half ($0.88 - 0.49 = 0.39$), or three-eighths of the entire reduction, is in ‘Fever’—the disease which, more than any other, shows itself in connection with such faults of drainage, of water-supply, and of filth accumulation, as it is within the province of good sanitary administration to remove.

“ ‘ It is particularly significant that, since the year 1870, when the fever death-rate was 0.80 per 1000, it has fallen pretty steadily, year by year, as follows, down to 0.33 in 1880:

1871.....	.70
1872.....	.61
1873.....	.58
1874.....	.59
1875.....	.55
1876.....	.44
1877.....	.41
1878.....	.42
1879.....	.30
1880.....	.32

“ ‘ Thus in the five years, 1871–5, the fever death-rate was 0.61; in the five years 1876–80, it was 0.38.’ ”

“ During the decade from 1861 to 1870, there appeared to be no gain from the outlay on sanitary works or on sanitary service in England and Wales; but since then the service appears to have made an effective start, and the pecuniary gain may be thus stated:

Under the inquiry as to interments, the cost of funerals—all round—was ascertained to be £5 each. The gain under that head will, therefore, be about one million by the quarter of a million of funerals saved during the last decade. The direct cost of sickness has been estimated at about £1 per case. The gain under that head will, therefore, amount to about three millions; a gain, that is to say, of medical treatment and other expenses. But the gain to the wage classes, from the saving of the lost labor, will have been far greater. Dr. James Watts, who has had great experience in friendly societies, states the average loss of working-time at two working weeks and a half per member between twenty-one and seventy years of age, and he estimates the total loss to the wage classes, by the loss of work through sickness, at upwards of thirteen millions per annum. The gain derivable from sanitation may be further illustrated from its advance in military service. The first British army went out to the Crimea under the established curative or medical service, and it was lost. Sanitary Commissioners, trained in service under the first General Board of Health, were then sent out to reform the condition of hospitals and camp, and within three months reduced the sickness and mortality from a plague-rate down to an ordinary standard of health, and by the end of the summer of 1855, to a rate lower than that of the best hospital at home; and the War Minister declared in Parliament that by the application of their science the second army has been saved. Since then, the Army Medical Department has applied extended sanitary operations. Their exercise under great difficulties is best shown in India. Formerly the death-rate in the Indian Army was 69 per 1000 per annum. The average mortality from 1869 to 1878 was only 20.41. There was, therefore, a gain of 48.59 per 1000; or, on the present force out there, a gain of 2350 men. The death-rate of the army at home was formerly 18 per 1000. In the year 1879 it was 7.55, being a gain of 10.55 per 1000. As the strength of the army in 1879 was 80,700, the gain was 843 per annum. The total gain to the army in India, and the army at home, and the rest of the army, will be 3443 men per annum. As each soldier is estimated at £100, this represents in money value £344,000, or more than a third of a million. It is not very easy to get at the real amount of sickness, but the total gain, including the diminished death-rate, is considered to be under-rated at half a million per annum. For the decade, the total saving of military force

from death have been upwards of forty thousand men, and upwards of eight millions and a quarter in money.

“The total number of men killed on the battle-field and on the deck, including those killed at Waterloo, Trafalgar, and the most severe battles during the twenty-two years’ war was, according to the army returns, 19,796. The lives saved from premature destruction by the civil sanitary service, during each of the ten years of the decade, was 25,000. The wounded during the twenty-two years’ war were 79,709 ; but, taking a serious sickness as equivalent to a wound, the achievement of the sanitary service has been, during the same period, some three millions of cases saved by the civil sanitary service. A reduction of the death-rate by $4\frac{1}{2}$ per cent. is only an instalment of sanitary progress. Thus, in the instance of Croyden, visited by the delegates of the Congress, the death-rate has been reduced from 25 to 16 per 1000 by supplies of pure water carried into the houses, and the foul water carried off at once out of the houses and out of the town by “Local Board Authority.” So in Salisbury, Leamington, and a number of other places.

“In London, the death-rates among the wage class in their common dwellings is upwards of 30 per 1,000 which in model dwellings it is about 16 or 17 per 1000 with surrounding deteriorating conditions.”

I have tried to prove to you that a large proportion of the sickness and death of our country is preventable. I have quoted in your hearing from the works of the best sanitarians of the age in which we live, facts and figures which not only go to prove the wholesome influence of Preventive Medicine, but also the terrible necessity there is for it.

Now, what will you do with it? The doctor, while a teacher, is chiefly concerned in the cure or palliation of disease actually existing, but with you and upon you, the people, the people of North Carolina, as well as of every other sovereignty upon earth rests the responsibility and also the ability in great measure to avoid this great waste of health and life.

The Legislature of North Carolina has seen fit in its wisdom to cripple the efforts of our State Board of Health which with rare energy and enthusiasm had been carrying on its work at the sacrifice of time and money upon the part of its members. Our appeal is to you : Let sanitary societies be formed in every town in the State;

have frequent meetings, see to it that in your library you have books of recent publication upon those subjects. Read the books, talk about them with your doctor, with your preacher, with your editor, with your neighbor, but especially talk to, and if necessary instruct your member of the Legislature. Let him see that you are interested on this subject, let him see that if disease and suffering can be prevented by State action then you want it. Tell him that while you want your fertilizers analyzed so that the food you give your land may not be adulterated, that you also want your food, your water, your medicine analyzed, so that the food, the drink, the medicine you give your wife and children may also be unadulterated. Thank him that he has provided educational facilities for your children, even if in small quantity and bad quality, but tell him also you would be more obliged if he would provide somewhat for the hygienic wants of your children at school, some few requirements as to the healthfulness of the site of the schoolhouse, some little regard to the water supply, to the ventilation of the house. Suggest that some regard should be paid to the relation between the number of pupils and the capacity of the house. Tell him to look after the lighting of the house so your child in seeking knowledge may not give an eye for it; also plead with him that proper precaution may be made with regard to infectious diseases, that the certificate of the family physician be required before the readmittance of a scholar after an attack of a contagious disease.

Tell your member that you have heard of color-blindness, and that it is reported that it is dangerous for men so afflicted to be employed on railroads and steamboats and ask his interference.

In a word, my friends, give this great subject that I, in my inexperience, have only been able to give you a mere outline, your serious, studious consideration, assured that no subject of greater importance to society, domestic or communal, could occupy your time or attention.

In conclusion, I wish to acknowledge my indebtedness to the Secretary of the Boards of Health of Rhode Island, Massachusetts, New Jersey, Michigan, and to Dr. Cabell, of the University of Virginia and to say that having fully availed myself of the results of their labors, I can, without egotism, earnestly commend to you, not the mode of expression but the ideas themselves.

SUCCESSFUL REMOVAL AND RECOVERY OF A MULTI- LOCULAR, ENCYSTED, OVARIAN TUMOR.

Read before the Medical Society of North Carolina at Tarborough,
N. C., May 16th, 1883.

By A. HOLMES, M.D., Clinton, N. C.

Mrs. B., wife of S. B., of Sampson County, N. C., about 33 years of age, and the mother of five children—a short history of her case may not be uninteresting and I give it as related to me at the time she applied for assistance.

On the 24th of February, 1882, she gave birth to a child, and that very soon after her confinement she enlarged rapidly until a severe attack of dysentery, which continued two weeks and reduced the size of abdomen almost to its normal condition. July following she first discovered a hard, movable body, below and to the right of the umbilicus.

October following she consulted her physician, Dr. J. H. Benton, of Newton Grove, Sampson county. She was brought to me a distance of 14 miles in November last, presenting the appearance of a woman in an advanced stage of utero-gestation, with a large floating or movable mass on the right side of umbilicus, reaching several inches above and below, fluctuating freely. The uterine sound was passed without trouble into the cavity of womb for two and a half inches, revealing no intra-uterine disease,

I informed Mrs. B. that, in my opinion, this was a case of encysted ovarian tumor and that an operation could alone relieve her.

She was brought to me again the latter part of November. On 31st of December, assisted by Dr. J. H. Faison, of Clinton, I introduced a trocar and drew off 12 quarts of a yellowish looking fluid. Drew off again, 28th January, 30 pints, and on 22d of February (on which day I expected to operate; but failed to secure necessary assistance) drew off 19 pints of similar liquid.

On 25th February, assisted by Dr. J. H. Benton, (to whom I am indebted for most valuable aid, I fully impressed Mrs. B., and husband with the imminent danger attending this truly formidable operation, the possibility of immediate death, and the liability of tumors of such a character after removal to return sooner or later)

she insisted that I should give her the benefit of an operation. The patient was placed upon a narrow, stout table, covered with blankets and quilts, over these a rubber cloth, shoulders and head supported by pillows, and as a preliminary step, about one ounce of spirits given.

A five per cent. solution of carbolic acid was prepared, a shallow dish filled with this solution, and every instrument to be used carefully wiped and placed in this dish. Large bowls were filled with this antiseptic solution for sponges and cloths for the occasion; silk ligatures and sutures carbolized, in fact with the exception of *spray*, as near Lister's mode of procedure as possible.

The patient thoroughly anesthetized with equal parts of chloroform and ether at the suggestion of my friend, Dr. Benton, (for I will state here that I always prefer chloroform, if pure, such as furnished by Squibb, of Brooklyn, as in my hands, the effects are sooner over with after operating, and causing less irritability of stomach. It should ever be remembered by the profession that an agent capable of destroying sensation and suspending the functions of intellect is, *indeed*, a dangerous one, and he who does not properly appreciate its power, and use every precaution to prevent its baneful influence is more to blame than the remedy.)

The incision was made in the linea alba, commencing about two inches below the umbilicus and extending towards the pubis full six inches in length. Upon examination I found the sac firmly adherent to parietes of abdomen along the edges of incision, and above the navel for some distance. The cyst was punctured with trocar, and a large quantity of fluid removed and saved. Finding it necessary to enlarge the incision I extended the cut above the navel to the right which was in its entire length, ten inches with cutting edges of scalpel, handle, and fingers carefully used I succeeded in breaking up the adhesions which extended on either side to the distance of between three and four inches. There was no attachment to omentum or bowels. The tumor was carefully removed, the pedicles soft and flattened, transfixed with carbolized silk ligature and detached from the right side of uterus. On the omentum I discovered a hard vascular growth, about two inches broad, which was ligated and removed; but having no connection with the tumor. The ligatures were cut as close to the knot as possible. The left ovary was carefully examined and found to be in a healthy condition. During the

operation a quantity of the liquid escaped into the cavity, which was carefully sponged out, and all removed as far as practicable, disturbing the viscera as little as possible. The incision with peritoneum was closed with thirteen stitches of carbolized silk, supported by long strips of rubber plaster, completed with compress and a many-tailed bondage. The pulse previous to operating was 116, and notwithstanding the patient vomited twice during the operation, her strength was less exhausted than could have been anticipated. She soon recovered from the anesthetic, with a pulse at 118, firm and equal, and expressed herself as feeling quite comfortable, with the exception of a smarting sensation along the line of incision. In half an hour she was placed in bed, and ten grs. of quinine with one half gr. morphia sulphate, given. Laudanum in 10 drop doses was ordered to be given every one, two or three hours in order to keep her in a perfect state of repose, and prevent any action of the abdominal viscera. The system was supported by nourishing diet, and brandy used as occasion required.

The catheter was used on second day to relieve bladder. There was no necessity for its use afterwards as the urine passed unaided.

The time occupied by the whole operation did not exceed forty-five minutes. The tumor alone, without fluid, weighed $4\frac{1}{2}$ lbs; but with fluid saved, and that drawn off a short time before operating weighed 43 pounds. The carbolic acid treatment was continued as a dressing, no pus formed and the wound united by first intention its entire length. Five of the stitches were removed on the fifth day and the remaining eight on the twelfth day.

After the removal of stitches she stood upon her feet, had gained strength and flesh and seemed to be quite well. In three weeks there was quite a free discharge of *menstrual fluid*, which returned at proper intervals, following months in usual quantity, giving no trouble.

On 7th of May she rode in an open buggy a distance of fourteen miles, expressed herself as being grateful for my kindness, was looking well, and was quite cheerful, carrying upon her arm a large basket used as a depository for purchases made during the day. She informed me the accustomed discharge had not made its appearance. I made inquiry as to sexual desire which was answered by saying, she felt no difference. I concluded conception had taken place.

She is at this time in good health with the prospect of a long and useful life.

The tumor and sac I have preserved and it is quite a curiosity to one who has never examined a multilocular cyst.

The number of small cyst enclosed in the larger sac are quite numerous and of varied sizes, and it is a matter of astonishment with what rapidity another fills after one is evacuated as shown by the frequent removal of liquid as stated above.

NEW CUPREA BARK, derived from localities in Columbia where it has not been collected previously, has lately arrived in Europe in small quantities. Large supplies of this important source of quinine will probably arrive in the course of time.—*New Remedies*, June.

POMEGRANATE BARK.—The U. S. Pharmacopœia excludes bark of the branches of pomegranate, but will probably have to recognize it in its next revision, since it appears to be equally efficacious, and it is impossible to supply the demand with the root-bark alone.—*New Remedies*, June.

WHITE LEAD IN ERYSIPELAS.—The rediscovery of the application of white lead as an application in erysipelas, is now a fashion in the medical journals. We refer our readers to Remking's Abstract, 1859, p. 146, V. 2.

DIVISION OF ARTERY BETWEEN LIGATURES, reported in the *British Medical Journal*, apparently as new, had its origin as far back as 1746. See *Medical Recorder*, Vol. 2, No. 1, p. 74, where a translation from the German of a case reported by Smucker, appears.


WATER TESTING IN THE COUNTRY.—“A Country Practitioner” sends the following to the *Lancet*, May 27, giving a short method of testing the purity of water. Take about two drachms of suspected water and add two drops of sulphuric acid, and one drop of Condyl’s fluid (64 grains permanganate of potassium to a pint of distilled water) which will give the usual purple color, and retain it after boiling, if no organic impurities are present. If organic impurities are present the sample of water is decolorized.

EDITORIAL.

THE NORTH CAROLINA MEDICAL JOURNAL.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY, PUBLISHED IN
WILMINGTON, N. C.

THOMAS F. WOOD, M. D., Wilmington, N. C., Editor.

 *Original communications are solicited from all parts of the country, and especially from the medical profession of THE CAROLINAS. Articles requiring illustrations can be promptly supplied by previous arrangement with the Editor. Any subscriber can have a specimen number sent free of cost to a friend whose attention he desires to call to the JOURNAL, by sending the address to this office. Prompt remittances from subscribers are absolutely necessary to enable us to maintain our work with vigor and acceptability. All remittances must be made payable to THOMAS F. WOOD, M. D., P. O. Drawer 791, Wilmington, N. C.*

BOARD OF MEDICAL EXAMINERS IN TARBOROUGH.

Nothing is of more interest to the North Carolina medical profession than the part the State Board of Medical Examiners is enacting in the promotion of medical education. No law on the statute book has more thoroughly vindicated its *raison d'être*, than the one establishing this Board, and few laws have so thoroughly gained the moral support of the people. This development has been slow, and in the nature of things could only progress *pari passu* with the Medical Society, the parent of the Board. The essential interdependence of these two bodies has proven how wisely the founders of our Society built.

In the early history of the Board, physicians sought their license in small numbers, and generally out of respect for the medical men who were their preceptors, rather than from a feeling of necessity. Many meetings of the Board were held at a heavy expense to the gentlemen composing it, because there were not candidates enough applying to pay the legalized sum. In fact this was true, until in 1879 the number of candidates rapidly increased.

In reviewing the character of the examinations for five years, a most marked difference has been observed as to their quality. For instance, the examinations at the Greensborough meeting as compared with those at Tarborough, put the latter class in a most favorable light.

When the method of examination at Tarborough is compared with that at Greensborough, it will be seen that this is not a mere compliment to the standing of the class freshest in the mind of the writer. For instance, at Tarborough, in nearly every case one written examination was required from the candidate. The examiner would either write out a set of questions for the entire number, or would give a fresh set of questions to each candidate. The written examination was conducted in the presence of the examiner, and as much time allowed for that purpose as seemed just to the candidate. This lengthened the time usually allotted, but upon the whole was more satisfactory. In this way thirty-one candidates were examined, and their merits passed upon, during four days. At Greensborough the Board had to be satisfied with oral examinations, the only test in writing was that of prescription-writing.

Taking all this difference into consideration, the examinations were more satisfactory, and the standard of scholarship higher at the Tarborough meeting.

It is particularly gratifying to note the manly persistency of several candidates rejected at previous meetings. Notwithstanding the fact that rejected candidates could have gone on in the practice, their failure virtually unknown to most of their patrons, instead of turning angrily against the Board, and defying its authority, many of them have bravely presented themselves for reëxamination, and three of such candidates have finally passed. It speaks well for the pluck of the candidate, and well for the course the Board has pursued.

Now, that we have firmly established this Board, it would be well to consider the improvements in it which have long been contemplated. In the first place, it should be a misdemeanor for any one to practice without the license of the Board. In the second place, the Board should be so constructed that two members should retire every year, thus maintaining its work and policy unbroken. Furthermore it would be a wise provision, and it is not so much of a dream as some may think who now read it for the first time, to have a local examiner

in each county to *examine candidates about to begin the study of medicine*. If this latter provision could be effected, it would not be long before the medical profession in this State would attain the standard we have long professed to desire.

We are thankful and gratified for successes already achieved, and if we can do no more than to fortify our present position, we will have done more for the profession than years of wrangling over codes could do.



PREPARE YOUR OWN TINCTURE OF CORN SILK.—Take of corn silk, green, 24 parts; diluted alcohol sufficient to make 100 parts. Cut the silk in small pieces, which are to be beaten to a pulp, in a cylindrical glass percolator, having its orifice closed, and add sufficient menstruum to form a layer over the pulp: cover closely, and macerate for 48 hours; then permit the percolation to take place at the rate of 40 drops per minute; add diluted alcohol, and continue the percolation until 100 parts are obtained.

The tincture has the odor of the drug, is of a yellow straw color, and of pleasant sweetish taste. Dose for an adult $\bar{3}$ i to $\bar{3}$ ij.—*New Remedies* [or make a tincture by macerating 4 $\bar{5}$ corn silk with a pint of whiskey, 14 days. Dose as above.

JEQUIRITY (ABRUS PRECATORIUS WILLDENOW.)—This plant is beautifully figured by a lithograph in the June number of *New Remedies* taken from Bentley & Triman's Medicinal Plants. "The remedy is usually prepared in the following manner: The seeds are soaked during a few hours in boiling water, and during three or four days in cold water. When they are more or less softened, they are more or less blanched, and the kernel is reduced to a fine powder, which is macerated for 24 hours, after which the liquid is filtered. The patient applies the liquid by bathing his eyes three times daily, in such a manner that it passes under the eyelids, or, (if more concentrated) it may be dropped in the eye during several consecutive days."

The justly celebrated Sydenham was of opinion that there was much less need of new remedies, than a knowledge how best to apply such as we already know.

REVIEWS AND BOOK NOTICES.

A TREATISE ON INSANITY IN ITS MEDICAL RELATIONS. By WILLIAM A. HAMMOND, M.D., etc., etc. New York: D. Appleton & Company, 1, 3, and 5 Bond Street. 1883. Pp. 767. (Price \$5.00 in cloth).

A reviewer need not be a specialist to know the merits of a work on a special subject, for although he may be lacking in the minutiae of a given specialty, he can have discrimination to say whether this or that book, after a careful examination, is adapted to his necessities. We do not venture, therefore, to write as an alienist, and our remarks must be taken as the opinion of a general practitioner, (country doctor is the plain English of the foregoing phrase, according to Dr. O'Hagan.)

It seems that Dr. Hammond does not write as an alienist in the sense of the word of a resident physician in an insane asylum, but as one who has studied specially and minutely the diseases of the brain and nervous system; for, as he observes in his preface, "the alienistic physician, whose practice is not restricted to a lunatic asylum, has peculiar facilities for studying insanity in its first and most curable stages." Furthermore, he says in the same connection, "The day has gone by when they were looked upon as the sole exponents of psychological medicine, and in all parts of the civilized world the greatest advances in that division of the healing science and art are made by physicians who are unconnected with asylums."

The volume is divided into four sections. The first section treats of the "General Principles of the Physiology and Pathology of the Human Mind." In this division Dr. Hammond has long been known to entertain peculiar views. In the discussion of the connection between the mind and the brain, the author gives us an early insight into some of the methods of treating psychological questions:

"On the one hand," he says, "it is concluded that the brain is only a tool or organ of which the mind makes use in man to manifest itself. According to this view, there is in every human being a mind not dependent upon the nervous system for its existence. On the other hand, it is asserted that the mind is directly the result of nervous action, and especially of the brain, and that if there were no nerve-substance there would be no mind. This view is that which is held by the majority of scientific writers of the present day.

* * * * "It may be * * remarked that if the mind is independent, self-conscious, immaterial personality, using the brain as its instrument for communicating with the external world, it is impossible for us to deny a like principle to the lower animals, differing only in degree as their brain differ from ours. They perceive, experience emotions, have intellects which memorize and exercise judgment, and wills to carry o it, in accordance with their powers, the conclusions to which their reasonings lead them."

"According to the theological school of philosophers, the mind of an idiot is as good as the mind of Herbert Spencer"—[we wish he had here quoted the particular theological philosopher] "better, perhaps in a moral point of view. The difference consists, in their opinion, solely in the fact that, whereas Herbert Spencer has a good tool to work with, the idiot has a bad one, and hence the product of his labor is of an inferior quality."

"The essential fault of these philosophers is that they confound the mind with the soul. Science has nothing to do with the latter. Its existence is altogether a matter of faith—not of proof—which people believe in or not, according to the education they have received and the subsequent reflection they have bestowed upon the subject. But the mind is found wherever there is gray nerve-matter in action, from the lowest invertebrate animal up to the highest and most intellectual man who walks the earth. With it science may properly concern itself, and with it theologians, as such, have nothing to do."

In treating the divisions of the mind,—perception, the intellect, the emotions, the will,—are further described and elucidated by diagrams, showing their relation to each other. He concludes by saying: "The mind, therefore, as before stated, is a compound force, and its elements are perception, intellect, emotion, and will. The sun, likewise, evolves a compound force, and its elements are light, heat, and actinism. One of these forces—light—is made up of several primary colors; and the intellect of man, one of the mental forces is composed of faculties. It would be easy to pursue the analogy, but enough has been said to indicate how closely the relationship between brain and mind is that of matter and force."

Further on he says: "But mind is not a fluid secretion to be compared to the gastric juice. It is a force produced by nervous action. As a galvanic battery evolves galvanism, so the brain evolves mind. If the battery is good, the galvanism is good; if the battery is bad, the galvanism is bad; if the gas is bad, we get a bad light. And, if the brain is bad, the mind will just so surely be bad."

We must apologize for not making these quotations in logical

sequence ; but as we have no room, if we had the ability, we will pass on to the part of this volume, which more nearly concerns the "country doctor."*

The fourth Section of this volume covers five hundred pages, and is devoted to the description and treatment of insanity.

The definition of insanity as formulated by several writers is given in review, the author preferring that by Dr. E. C. Spitzka, which he thinks with some modifications, may be made sufficiently satisfactory. It is:

"Insanity is either the inability of the individual to correctly register impressions and experiences in sufficient number to serve as rational guides to rational behaviour in consonance with the individual's age, time, and circumstances, or, such impressions and experiences being correctly accumulated in sufficient number, a failure to coördinate them, and thereon form logical conclusions, or any other gross mental incongruity with the individual's surroundings in the shape of subjective manifestations of cerebral disease or defect, excluding the phenomena of sleep, trance, somnambulism, the ordinary manifestations of the neuroses, such as epilepsy and hysteria, of febrile delirium, coma, acute intoxication, and the ordinary immediate results of nervous shock and injury." This definition, however, excludes all morbid impulses, and all emotional and volitional manifestations of mental derangement." P. 265.

Dr. Hammond says: "Insanity, strictly speaking, is only a symptom of cerebral disease and I would define it as a manifestation of disease of brain, characterized by a general or partial derangement of one or more faculties of the mind, and in which, while consciousness is not abolished, mental freedom is weakened, perverted or destroyed."

In the chapter on the diagnosis of insanity, the subject is considered from the purely medical stand-point, irrespective of what parliaments and legislatures and courts have decided. With the exception of the chapter on prognosis, no division of this work has more interest for the "country doctor."

Dr. Hammond treats fully the question "*Shall the insane person be treated at home or in an asylum?*" presenting the question in a light well worthy of careful study. He alludes to the unreliable

*Again accepting the interpretation of the term "general practitioner" as defined by our friend from Greenville.

manner in which public asylums are inspected : to the dangers of appointing to the position of Superintendents, men who have no qualification but their allegiance to their party, and even when the superintendent happens to be a competent man, his tenure of office is uncertain owing to the political changes made at every election. He boldly expresses the belief "that no insane person who can be properly cared for at home, in the way of medical attendance and nursing, or who can be placed in a private, or what may be called a 'family asylum,' should be committed to a public institution for lunatics."

"The connections of sleep with insanity are so intimate and numerous," the author has wisely devoted more than a hundred pages to it.

We have exceeded the limit of our space in noticing this excellent treatise, and have put it aside with a feeling of regret for our inability to say more. Since the work of "Rush on the Mind," we believe this is the first systematic treatise on insanity by an American author.* We have nothing but praise for this volume, viewing it from the standpoint of a general practitioner, as we do, and we most heartily recommend it to our readers ; for as compared with Bucknill and Tuke, and Blandford, we do not hesitate to say that it will prove of more value as a consulting volume than either of them.

The publishers have given us a handsome volume—good paper, large, clear, type, and as distasteful as the subject of insanity is to some of us, he must be a difficult man to interest, who would not be enticed far on into these pages at one sitting.

OBSERVATIONS ON LITHOTOMY, LITHOTRITY, AND THE EARLY DETECTION OF STONE IN THE BLADDER, WITH A DESCRIPTION OF A NEW METHOD OF TAPPING THE BLADDER. By REGINALD HARRISON, F.R.C.S. London: J. & A. Churchill, 11 New Burlington St. 1883.

Mr. Harrison is well known on this side of the Atlantic by his treatise on Stricture noticed in the JOURNAL of . The work before us is a monograph on treatment of stone in the bladder founded upon cases which he has from time to time brought under notice at various medical societies.

*We do not forget that Dr. Charles E. Johnson, of Raleigh, wrote a treatise entitled "The Question of Insanity and its Medico-Legal Relations, Considered upon General Principles;" but this was of a nature of a monograph.

Mr. Harrison's new method of tapping the bladder of old patients suffering with retention dependent upon enlarged prostate may be described as follows:

The patient is placed in the usual position for lithotomy. A trocar, made for the purpose, with a silver canula, is introduced into the median line of the perineum, three quarters of an inch in front of the anus, and it is pushed steadily through the prostate into the bladder, the surgeon at the same time retaining his left index finger in the rectum for a guide. The canula being provided with a shield is secured in its place by tapes much in the same way as a tracheotomy-tube. A piece of India-rubber tubing is attached to the portion of the canula projecting beyond the shield, by this means conveying the urine into a vessel placed at the bedside.

In one case described, the patient passed urine entirely through the prostatic canula for six weeks. His health rapidly improved.

Then it was noticed that the urine in gradually increasing quantities began to flow through the natural passages, so much as to lead to the inference that the prostate was ceasing to obstruct micturition. In three months and a half after the operation, the canula was removed, and the punctured wound healed in a few days, and with it the bladder gradually acquired its natural function and power. It seems then, that in this case the surgical proceeding caused rapid atrophy of the prostate. Prof. Gross says: "My conviction is, that this operation is destined to come into general use in this class of cases, of such frequent occurrence in advanced life, and a source of so much suffering."

A TREATISE ON THERAPEUTICS COMPRISING MATERIA MEDICA AND TOXICOLOGY. With especial reference to the application of the Physiological Action of Drugs to Clinical Medicine. By H. C. Wood, Jr., M.D., etc. Fourth Edition. Revised and Enlarged. Philadelphia: J. B. Lippincott & Co. 1882. Pp. 736. [Price \$6.]

The diligent reader who has observed attentively the vast number of remedial agents which have burdened the medical journals of all countries for the past ten years especially, will no doubt esteem it a pleasure to find some resting place for his weakening faith in therapeutics, in a volume written with scrupulous care, after due preparation by the author. Such a volume is the one before us. It abounds in common sense, which seems to temper all the scientific

knowledge set forth. If the author has one conspicuous fault it is that he believes too little, and it is this kind of skepticism which has made this book the solid volume it is.

Of course Wood's Therapeutics is no new book, but in these days when readers are so constantly diverted by the claims of newer books, they can profitably examine this new edition, determine for themselves how fully and completely our author has earned his place at the head of the list.

To these practitioners who are not familiar with this volume, or with the comparatively recent teaching of the therapeutics of digitalis, especially, we would advise a careful study of Dr. Wood's article on this subject, as it contains the essence of the present state of the knowledge of this drug.

The second part of the volume contains chapters on heat and electricity, and an appendix on the art of prescribing. The volume has a good general index, and an index of diseases which is especially useful for rapid reference in the hurry of daily practice.

We miss many of the recent remedies, even some which have become established, but by referring to the last edition of the Dispensatory—that famous treasure-book of materia medica and therapeutics—we may find an opinion on many of the articles omitted altogether or only briefly mentioned here.

Take it for all in all we know of no single work on therapeutics as fit to be the constant companion of the busy doctor.

MEDICAL AND SURGICAL ASPECTS OF IN-KNEE-(GENU-VALGUM):

Its Relation to Rickets ; Its Prevention and its Treatment with and without Surgical Operation. By W. J. LITTLE, M.D., F.R.C.P. Assisted by E. MUIRHEAD LITTLE, M.R.C.S. Illustrated by upwards of Fifty Figures and Diagrams. D. Appleton & Co. New York : 1882. Pp. 160.

The enumeration of the clinical varieties of genu-valgum given by the author is as follows:

a. Atonic, idiopathic, statical or uncomplicated genu-valgum, not rachitic, in infants hand-fed upon too watery diet before or when beginning to walk.

b. Older strong-limbed children who had for one or more years walked perfectly well until they became affected with general debility followed by genu-valgum.

c. Adolescents, not rachitic, suffering from general debility caused by too rapid growth, late hours, too much study.

d. Children congenitally weak with congenital rickets, or atelectasis.

e. From over-use of a sound knee, or from dislocation of a sound knee having accommodated itself to a short defect, or to a weak, wasted neighbor.

f. Over-fed, over-stout, fat heavy infants or adolescents.

g. From partial paralysis or spasm of the muscles moving the knee-joint.

h. From rachitis.

i. From rheumatic, strumous and traumatic knee affections. The authors conclusions are that there are several clinically and pathologically well-marked varieties of in-knee, and that of these varieties the rachitic is not the most frequent.

One third of the volume is devoted to a discussion of treatment by gentle means, constitutionally, by mechanical apparatus, by manipulation, by splints, by irons, by position, by osteotomy. This book will specially interest orthopedic surgeons, but will be consulted by the general practitioner, who has not imbibed the weakness of sending every case of in-knee to the metropolitan specialist.

THE MEDICAL AND SURGICAL HISTORY OF THE WAR, &c. Part III.

Vol. II. Surgical History. Washington: Prepared under the Direction of JOSEPH K. BARNES, Surgeon-General U. S. Army. By GEORGE A. OTIS, Surgeon U. S. A., and D. L. HUNTINGTON, Surgeon U. S. A. Government Printing Office. 1883.

This volume closes the Surgical Series of the History of the War. The work nearly finished by Dr. Otis, was carried to a successful conclusion by Dr. Huntington.

A critical analysis of such a volume would be beyond our limits if we devoted every page to it, and so it remains only for us to say, that this great work is a living monument "to its authors, an honor to the medical service, and a contribution to American medicine of the greatest importance.

Wounds of the lower extremities are described at length, occupying 639 pages. These are beautifully illustrated by 15 chromolithographs by Sinclair, 22 lithographic reproductions of photographs, and numerous woodcuts.

The figures of distorted missiles, and illustrations of the entrance and exit of balls, are beautifully done.

Dry gangrene and especially hospital gangrene receive a most interesting share of attention.

It is to be regretted that the records of anesthetics and anesthesia are so incomplete. But this is owing to the confusion incident to the busy scenes in field hospitals during engagements, and not to any lack of attention to the subject by the compilers.

The volume concludes with an account of the organization of the Medical Staff and to the means of transportation and care of the sick. We find also a useful subject-matter index of the three volumes of the surgical part of the work, which greatly facilitates reference.

THE PRACTITIONER'S READY REFERENCE BOOK. A Handy Guide in Office and Bedside Practice. By RICHARD J. DUNGLISON, A.M., M.D. Third Edition. Thoroughly Revised and Enlarged. Philadelphia: P. Blakiston Son & Company. 1883. Pp. 529. Price \$3.50.

For a medical book to reach a third edition in six years, and for each edition to be greatly augmented and improved, is unusual success. In this edition the doses of remedies, and pharmacopœial groups, are arranged to agree with the new Pharmacopœia. As a table reference book for nearly everything occurring daily to the busy doctor, we do not know where else he could find so many important items brought together. While such volumes do not represent any very high scientific standard, they will continue to be useful to physicians who are not possessed of good libraries.

HEADACHES: THEIR NATURE, CAUSES AND TREATMENT. By WILLIAM HENRY DAY, M.D. Fourth Edition. With Illustrations. Philadelphia: P. Blakiston Son & Co., 1012 Walnut Street. 1883. (Price in paper, 75 cents; cloth, \$1.25.)

Since we first noticed this volume it has been much improved, and as our acquaintance with it is more intimate, we value it more highly.

Older practitioners must agree that the causes of headaches are so numerous, and their varieties are so perplexing and difficult to diagnosticate, that intelligent help in the way of a book from the pen of an accomplished teacher, is much to be desired. Dr. Day has

given us such a book. The general introduction is full of thoughtful observations on the functions and disorders of the brain.

The volume closes with a formulary which some practitioners value so highly, and which may doubtless be helpful as suggestions as to dosage.

REMINISCENCES AND MEMOIRS OF NORTH CAROLINA AND EMINENT NORTH CAROLINIANS. By JOHN H. WHEELER. Washington, D. C.: Joseph Shillington. 1883. (Price \$1. Quarto. Pp. 100.)

This is a serial work printed from the posthumous papers of Mr. Wheeler. The counties are taken in alphabetical order, and sketches of the worthies of these counties are written in order of time. We have no means to judge of the accuracy of the sketches, but the amount of information here collected is valuable, although the narrative is not very attractive as regards the style. As a work of reference it will be a valuable acquisition to the libraries of North Carolinians.

THE AMERICAN PSYCHOLOGICAL JOURNAL is a handsome Quarterly Journal, issued by the National Association for the Protection of the Insane, and the Prevention of Insanity. It is edited by Joseph Parrish, M.D., of Burlington, N. J., and published by Messrs. P. Blakiston Son & Co., 1012 Walnut Street, Philadelphia, at \$2.00 per annum.

The Southern Medical College, of Atlanta, Georgia, sends out a pamphlet setting forth "its aims and objects," which is a mixture of philanthropic oratory and college advertisement of the least modest variety. The invitation to beneficiaries to embrace the wonderful advantages of this school, and the invitation to "Dear Doctor" to "read my article on the subject of mineral waters," by one of the "Professors," is a droll effort at attracting attention. What a pity that such institutions are encouraged to continue for even a single session !

AMERICAN MEDICAL ASSOCIATION.

The American Medical Association met in Cleaveland, and continued in session June 5, 6, 7 and 8. The address of welcome was delivered by General Edward S. Meyer.

The President, the veteran Dr. John L. Atlee, of Lancaster, then delivered his address, which consisted in a most graphic and interesting description of the condition of our profession sixty-five years ago, when he was a student; it was replete with reminescences of the distinguished teachers of those by-gone days, and was listened to with great attention.

BUSINESS TRANSACTED.

Drs. J. S. Billings, U. S. A., presented a communication from the President of the British Medical Association and Dr. Mahomed, inviting coöperation with the committee of the Association on the

COLLECTIVE INVESTIGATION OF DISEASE.

Dr. H. D. Didama, of New York, prescribed a communication from Dr. Tyndale, of New York, containing a petition to Congress, the Secretary of War, and the Signal Service Department, requesting that a committee of five professional gentlemen be appointed to establish

CLIMATIC OBSERVATIONS

at the general health resorts and watering places, and to collect data in regard to the sanitary value of the localities in regard to pulmonary disease. Adopted.

Prof. S. D. Gross, of Philadelphia, read a communication signed by himself, Dr. Austin Flint, Jr., and Dr. Oliver Wendell Holmes urging upon the Association the importance of petitioning Congress to provide a suitable fire proof building for the Army Medical Museum and Library.

Dr. H. A. Johnson, of Chicago, then offered a series of resolutions to this effect, in which Congress is asked to make an annual appropriation of \$10,000 for the purchase of books.

The report of the Trustees of the new Journal was read, which shows that they have received pledges of subscription to the number of 2,500. The journal will be published in Chicago by A. D. Newell

& Co. Dr. N. S. Davis, of the same city, will be the editor, and the first number will be issued soon after July 1. The minutes of the meetings will hereafter be published in a small volume, the papers appearing in the Association Journal.

A resolution was offered by Dr. Batchelor and adopted, that the President shall appoint one or more members from each State, whose duty it shall be to secure by petition or otherwise the passage in their respective States of more stringent laws respecting the sale of poisons.

Dr. S. D. Gross, of Philadelphia, offered a resolution that in recognition of the necessity of trained nurses, and the benefit that has arisen from the establishment of training schools for nurses in large cities, the Association recommends the establishment of similar schools in every county of each State, instruction to be given gratuitously, or at rates which do not exclude the poor from their benefits.

Dr. Walter Hay, of Illinois, moved that a special

SECTION OF PSYCHOLOGICAL MEDICINE

be organized. Laid over for one year in accordance with the rules.

The report of the Standing Committee on

ATMOSPHERIC CONDITIONS AND THEIR RELATIONS TO THE PREVALENCE OF DISEASE,

was presented by Dr. N. S. Davis, Chairman. He stated that the work of the Committee was begun as quickly as possible after the last meeting. Observers had been appointed in twelve different parts of the United States, who received instructions to take accurate observation, during the day and night of every day in the year, as well as to note the presence of any organic matter in the air. He then spoke of the necessity of continuing the observations through several years, and closed with a statement of the finances of the Committee.

Dr. S. Pollak, of Missouri, offered a resolution on behalf of the St. Louis Medical Society, to the effect that whereas many of the provisions of the present Code of Ethics are obsolete, and that early revision is necessary and that no society except the American Medical Association has any power to alter the present Code, but only to

ask for its revision ; therefore, that the American Medical Association be respectfully requested to appoint a Committee of one member from each State, for the purpose of taking into consideration the propriety of revision of the Code of Ethics of the American Medical Association, and report thereon at the meeting of 1884. That this Committee be authorized to propose a Code of Ethics, which in their opinion, will meet the wishes of the profession, and to submit the same at the next annual meeting.

It was immediately moved and seconded, by more than a hundred voices, that these resolutions be laid upon the table, and the motion was carried almost unanimously, amidst loud applause.

The Nominating Committee reported the following nominations of members of the

BOARD OF TRUSTEES OF THE JOURNAL.

to fill the positions occupied by those whose term expires this year, and one to fill the vacancy occasioned by the resignation of Dr. N. S. Davis: A. Garcelon, of Maine; J. O. Hooper, of Arkansas; L. S. McMurtry, of Kentucky; and J. H. Hollister, of Illinois.

THE COMMITTEE ON PUBLICATION

reported that an index of all the volumes of Transactions was now in preparation, of which 1,500 copies would be issued, at a cost of \$500, and would be sold to members at one dollar per volume. The report was received and adopted.

THE COMMITTEE ON NOMINATIONS

presented the following report which was adopted:

President.—Austin Flint, Sr., M.D., of New York.

Vice-Presidents.—R. A. Kinloch, M.D., of Charleston, S. C.

T. B. Lester, M.D., of Kansas City, Mo.

A. L. Gihon, M.D., of N. S. Navy.

S. C. Gordon, M.D., of Portland, Maine,

Treasurer.—R. J. Dunglison, M.D., of Philadelphia.

Librarian.—C. H. A. Kleinschmidt, M.D., of Washington, D. C.

Place and Time of Meeting.—Washington, on the first Tuesday in May, 1884.

Chairman of Committee on Arrangements.—A. Y. P. Garnett, M.D., of Washington.

Assistant Secretary.—D. W. Prentiss, M.D., of Washington.

CHAIRMEN OF SECTIONS.

Practice of Medicine.—J. V. Shoemaker, of Pennsylvania.

Obstetrics.—T. A. Reamy, of Cincinnati.

Surgery.—C. T. Parks, of Illinois.

Ophthalmology.—J. J. Chisolm, of Baltimore.

Diseases of Children.—Wm. Lee, of Indiana.

State Medicine.—J. D. Roberts, of Tennessee.

Oral Surgery.—T. W. Brophy, of Illinois.

The following were appointed a committee on surgical service aboard steamers and other ocean vessels: Dr. A. N. Bell, of New York; Dr. A. L. Gihon, United States Navy; Dr. J. N. Quimby, New Jersey; Dr. O. Marcy, of Massachusetts, and Dr. Henry H. Smith of Pennsylvania.

ADVANCEMENT IN CREMATION.

Dr. Keller presented the following :

That in the very near future, if not now, cremation will become a sanitary necessity in the large cities and populous districts of the country, and that the question be referred to the section on hygiene, which was done.

Dr. William Bodine and Dr. H. T. Walker were selected as delegates to the Canadian Medical Association meeting.

PAPERS READ.

Dr. Robert D. Murray, U. S. Marine Hospital Service, subject: Yellow Fever.

Dr. Wm. Morrow Beach, Ohio, subject: Milk Sickness.

Dr. W. H. Byford, Chicago, subject: Chronic Intra-Pelvic Inflammation.

Dr. Henry G. Landis, Columbus, Ohio, subject: Post-partum Polypoid Tumors.

Dr. H. O. Harey, Massachusettes, subject: The Restoration of the Perinaeum by a New Method.

Dr. R. S. Sutton, Pennsylvania, subject: Enterotomy as a complication in Ovariectomy or Oöphorectomy.

Dr. Reuben A. Vance, Ohio, subject: The Radical Cure of Hernia by a New Method.

Dr. Dudley P. Allen, Ohio, subject: A Comparison of Antiseptic and Non-Antiseptic Methods of Treatment.

Dr. Henry A. Martin, Massachusetts, subject: The Treatment of Synovial Diseases by a New Method.

Dr. Lawrence Turnbull, Philadelphia, subject: Paralysis of the Facial Nerve in Connection with Diseases of the Ear.

Dr. W. C. Jarvis, New York, subject: Tonsilotomy by Ecrasement.

Dr. Carl Seiler, Philadelphia, subject: Action of Nitrate of Silver on the Mucous Membrane of the Throat.

Dr. C. Williams, St. Paul, Minn., subject: Myringitis.

Dr. C. W. Earle, Chicago, subject: Cephalhæmatoma in New-born.

Dr. J. H. Hollister, Chicago, subject: The Address in Medicine.

Dr. J. K. Bartlett, Wisconsin, subject: The Address in Obstetrics and Diseases of Women.

Dr. W. F. Peck, Davenport, Iowa, subject: The Address in Surgery.

Dr. Foster Pratt, Kalamazoo, Mich., subject: The Address on State Medicine.

Dr. R. M. Blount, Indiana, subject: Address on Diseases of Children.

Dr. Paul T. Eve, Nashville, Tenn., subject: An Appliance for keeping the Arm Stationary.—*Medical and Surgical Reporter*.



WE learn by the *Cleveland Leader* kindly sent us by Dr. E. Grissom, that he and Dr. Charles M. Woollen were present at the meeting of the American Medical Association held in Cleaveland, Ohio, 5th, 6th, 7th and 8th June.

Dr. Grissom was on the Committee of Nominations from North Carolina.

Dr. James McKee, of Raleigh, was placed upon the Section of State Medicine, and Dr. Hubert Haywood, of Raleigh, was made a member of the Committee on Necrology.

Dr. Grissom was also restored to a place in the Judicial Council.

AN OLD ERROR REVIVED, AND PROPERLY ANTAGONIZED—SMALL-POX ATTENUATED WITH MILK.

Our readers not fresh from the history of the experiments of Thiele, the Russian physician who claimed to produce artificial vaccine, by inoculating cows with small-pox, may also forget that this same doctor in his enthusiasm as to the facility of this transmutation, declared that he could convert small-pox virus into vaccine by diluting it with warm milk (*Heuke's Zeitschrift für die Staatsarzneikunde* t. xxxvii. 1839. H. 1.

M. Robert also (see Steinbrenner's *Traité sur la Vaccine*, p. 169) some years earlier, we believe, conceived the same idea, that is, if variolous and varioloid virus were mixed with fresh milk at the moment of inoculation, the resulting pustules (*boutons*) were very much like vaccine, and no general eruption would follow.

These theories failed to receive the credit of sensible observers, and have for half a century been regarded as impossibilities, until lately Dr. M. Schuppert, of New Orleans, has been attempting to revive this theory. In addition to a paper on the subject which has been going the rounds of the medical journals, he read one at the late meeting of the Louisiana State Medical Society, entitled "Anti-Vaccination." The record says* this paper "was referred to the Publishing Committee, but the Doctor objected, stating that if the Society wished it published they could order it by vote. He refused to have it referred to the Publishing Committee, which consisted of five members.

Dr. Bemiss discussed the paper, stating that he was a firm believer in vaccination and re-vaccination.

At the conclusion of Dr. Bemiss' remarks, he introduced the following resolutions, which were adopted:

"WHEREAS, This Society is informed that it is the practice of one or more practitioners in this State to inoculate human subjects with lymph or pus taken from small-pox patients, previously mixing it with milk or cream, therefore, be it

"*Resolved*, That the practice of inoculating small-pox by mixing any product whatever from the body of a small-pox patient with milk, cream, butter or any fluid obtained from the cow, is productive of no modification, beyond that of direct inoculation from one person to another.

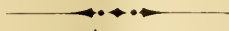
*Abstract of Proceedings, &c., &c., New Orleans, 1883, p. 13.

“ *Resolved*, That this Society emphatically affirms its strong confidence in the efficiency of vaccinations and re-vaccinations as the surest and only practical means of preventing the spread of small-pox.*

“ It does not deprive the person thus inoculated of that power to communicate the disease through the atmosphere which natural small-pox possesses and is therefore dangerous to the public health.”

While a resolution by a Society does not determine the theory, it is but right that the public should hear the authoritative voice of a learned society declaring the truth as received by a vast majority of medical men in every part of the world. The theory can be discussed at the leisure of the promulgators of it; only let the people have the advantage of protection until they prove their assertions.

The Louisiana Medical Society acted wisely!



CLEANING OF SPONGES.—For removing the greasiness of toilet sponges that have been in use for some time, M. v. Valta recommends the following: the sponge is first washed with water as well as possible, then placed upon a plate, a little powdered calcium chloride being sprinkled over it and allowed to liquefy; after about thirty minutes it may be washed with water and dried, when it will have an appearance like a new sponge.—*Phar. Zeitung.*, 1883, No. 27. —*Amer. Jour. of Pharmacy.*

TAMAR INDIEN.—“ *L'Union Pharmaceutique*” publishes the following formula for its preparation: Mix pulp of tamarinds 450 gm., powdered sugar 40 gm., powdered milk sugar 60 gm., glycerin 50 gm.; evaporate to the consistence of a soft extract and add powdered senna 50 gm., powdered anise 10 gm., oil of lemon 3 gm., tartaric acid 3 gm.; form this mixture into 100 boluses, and after exposing these to the vapors of water roll them in a powder composed of cream of tartar 5 gm., sugar and milk sugar each 35 gm., tragacanth 3 gm., tartaric acid 2 gm., and red saunders 25 gm. Dry and wrap in tinfoil.—*Jour. Phar. d'Als.-Lorr.*, 1883, p. 93.—*American Journal of Pharmacy.*

*The resolutions were transposed in the original.

CURRENT PUBLICATIONS.

The Pine Moth, of Nantucket, is the title of a paper by Samuel H. Scudder. This little insect is capable of destroying large bodies of pines, (*Pinus rigida*), but no adequate remedy has been devised.

The Relative Merits of Humanized and Bovine Vaccine Virus.
By Eugene Foster, M.D., of Augusta.

This pamphlet discusses in the compass of 45 pages, many points involved in the correct estimate of the value of the vaccine stocks in use. Its author has evidently not had access to some of the more important works on the subject, or he would have known that Bousquet has beautifully pictured the comparison of long humanized virus with recent cow-pox, and that Dr. Martin had reproduced this in his report to the American Medical Association in 1877.

Dr. Foster says: "The man who can read Hutchinson's report of cases of vaccinal syphilis and find proof to convince himself they were consequent upon infection of vaccine virus, is exceedingly anxious to be so convinced."

Notwithstanding this sweeping declaration, Dr. Foster could not have made it, had he read attentively the article on "Vaccination Syphilis" in Mr. Jonathan Hutchinson's "Illustrations of Clinical Surgery," from p. 114 to 140, that is, if he had been willing to credit the author with truthfulness. One point in this pamphlet shows that the author did not consult the work referred to, is that while he claims to give "nearly all, if not the entire list of reporters of vaccinal syphilis," he credits Mr. Hutchinson with only "15, number vaccinated, 2 of this number infected, not infected, 13."

Now, Mr. Hutchinson gives *six distinct series of cases*. In the first series *twelve persons* were vaccinated, and *ten* of this number had indurated chancres in the eighth week. In the second series, *nine* children vaccinated from the same person had unquestionable signs of constitutional syphilis, *six* others had "suspicious symptoms." In the *third* series there was *one* case, in the *fourth* there was one, in the *fifth* *two*, and in the sixth series *one*. So that altogether there were *twenty-three* undoubted cases, and six suspicious ones, instead of *two*, as stated by Dr. Foster.

It is not necessary to pursue the analysis of this essay farther, but well intended defenses of vaccination lose much of their force by inaccuracy, and really give weapons to such fanatics as William Tebbs.

We would add here an item which bears upon this very point. The *British Medical Journal* of the 16th inst., has an editorial account of Dr. Cory of the British Local Government Board having infected himself with syphilis in the progress of experimental vaccination.

Some excellent articles by Dr. J. R. Quinian, of Baltimore "*The Introduction of Inoculation and Vaccination into Maryland Historically Considered*," are appearing in the *Maryland Medical Journal*. They are full of interest to the historian and physician, giving one an insight into the early state of medical practice in the colonies. Dr. Quinian has great historical acumen, and the most remarkable talent for discovering every little grain of truth. No pile of books is too old or too musty for him to ransack, and it must be a barren old 1800—er that yields no item to him.

Homicide and Suicide, in the City and County of Philadelphia during a decade 1871 to 1881 inclusive by John G. Lee, M.D., Coroner's Physician, in an interesting pamphlet to the statist and coroner's physician. Hanging and shooting were the most numerous methods of self-destruction. Dr. Lee is the author of a very useful volume, "Hand-Book for Coroners."

The Opium Habit.—Its successful treatment by the *Avena Sativa*, By E. H. M. Sell, A.M., M.D., does not strike us as a very convincing contribution to therapeutics. We will hear more of it at a future season.

How can we Obtain and Preserve the Best Eyesight and Hearing, by Leartus Connor, A.M., M.D., is the title of a paper read before the Sanitary Convention at Greenville, Michigan. It is a valuable reprint from the Report of the Michigan Board of Health.

The Clinical History and Exact Localization of Perinephric Abscesses, by John B. Roberts, M.D., is a pamphlet reprinted from the *American Journal of Medical Sciences*, for April, 1883. The essay closes with a tabular grouping of the more important deductions of the anatomico-clinical study, and serves as a valuable diagnostic guide.

Consultation Chart of the Eye-Symptoms and Eye-Complications of General Diseases arranged after Foerster and others, by Henry G. Cromwell, M.D., Columbus, Ohio. (Price 25 cents.) Its title fully explains it, and as it is handsomely printed one will be readily tempted to use it, when in quest of such useful items.

Extracts of Letters From Major-General Bryan Grimes to his Wife.—We are indebted to Mr. Pulaski Cowper for a copy of this valuable historical fragment. It is fresh, honest, disingenuous, full of the ardor of true patriotism, and entitles General Grimes to a far higher place in his country's gratitude, than even his warmest friends have heretofore awarded him.

A pamphlet on *Small-Pox and Vaccination*, written by Prof. S. E. Chaillé, and distributed gratuitously by that excellent working body, the *New Orleans Auxiliary Sanitary Association*, is timely. There has been some effort to bring into New Orleans some old exploded theories on the use of virus for vaccination, and this pamphlet with the declaration of the Medical Society of Louisiana, given on another page, ought to set all thinking people right again.

Dr. Chaillé on School Physiologies.—Dr. Chaillé has taken the pains to analyze the merits of school physiologies, at the request of some of his friends—teachers who were interested. The doctor is not given to indiscriminate praise, and therefore what he says about books has certain merit. He agrees with Dr. Edward Jarvis, that a good physiology for schools should have a direct reference to the *preservation of health*, rather than the cure of disease.

Annual Report of the North Carolina Agricultural Experiment Station, for 1882, is full of interest, and should have been noticed before ; but we have had little space for non-medical matter. The value of various chemicals as fertilizers, home-made manures and composts, cotton seed and its products, the soja bean, eusilage, soil experiments are some of the running titles we notice, and a perusal of the volume enables us to urge upon our friends who are addicted to farming and physic, to send and get the volume. The Board of Agriculture has done valuable service for the State Board of Health, and is an honor to our State.

The Director of the Experiment Station seems to have had some difficulty about the name and origin of the cow-pea. May not this quotation from Lawson (Raleigh Ed., p. 337) throw some light on it? "The small red pea is very common with them [the Indians] and they eat a great deal of that and other sorts boiled with their meat or eaten with bear's fat, which food makes them break wind backwards, which the men frequently do and laugh heartily at it, it being accounted no ill manners amongst the Indians—yet the women are more modest than to follow that ill custom."

Dr. J. G. Thomas' address delivered before the "Citizen's Sanitary Association," of Savannah, sets forth plainly and forcibly what the quarantine service of the Atlantic coast lost in the failure of the appropriation to the National Board of Health. Even among the physicians in Savannah, and in the whole South, there are two distinct parties for and against the support of national quarantine stations, still we think that Dr. Thomas' position is well taken, and we believe that a healthy reaction in favor of the National Board of Health is taking place. The Marine Hospital service is ambitious to undertake the whole responsibility, but when it becomes evident, as it surely will sooner or later, that this service will be damaged by this addition to its executive machinery, the National Board will readily be put in charge of it by Congress. We all understand the jealousy of States as regards quarantine, and we think this is proper; but such a position is not incompatible with the maintenance by the Government, of necessary stations, to act in conjunction with State establishments.

Dr. Thomas sets forth the excellent work done by the National Board, and we trust his address will be as widely read as it deserves to be.

North Carolina Agricultural Experiment Station. 1883. IV. Analysis and Valuation of Fertilizers. Up to March 1st, 1883. The Agricultural Department is the sole example of the progress which the State is making in its public function. For a wonder this useful organization has been allowed to grow, and if the State has done anything else in the progress of civilization, it has been in spite of the public statutes. But let us rejoice in this one good thing, and wait!

The Clinical Diagnosis of Chronic Enlargements of the Testicle.—This is a thesis by Dr. J. Edwin Michael, of Baltimore, upon his admission to membership in the Baltimore Academy of Medicine. It is worthy of a careful perusal, but we quote only one practical observation from his concluding paragraph: "Unless the diagnosis of malignant disease is exceptionally clear no testicle should be extirpated without a vigorous use of anti-syphilitic medication. * * Explorating punctures with a large trocar is also to be strongly insisted on especially in cases where the diagnosis lies between cystic disease, non-transparent hydrocele and spermatocele."

Aids to Medicine. Part I. The General Diseases, Diseases of the Lungs, Heart, Bloodvessels, and Liver. This is a 12mo pamphlet reprinted by Putnam & Sons (27 West 23d Street, New York. Price, 50 cents) of one of the Student's Aid Series. By Dr. C. E. Armand Semple. Its title indicates its scope.

By John B. Roberts, M.D., of Philadelphia, is a reprint from the *Medical News*, January 13, 1883, entitled *Heart Puncture and Heart Suture*. This paper is to defend the thesis that "direct abstraction of blood by aspiration, will be recognized as the best treatment in cases of greatly dilated or much distended right heart, with intense pulmonary enlargement; and that incisions of the pericardium, with suture of the heart-muscle, will be accepted as proper in cardiac wounds."

The Best Method of Treating Operative Wounds, by Henry O. Marcy, A. M., M. D., in a neatly printed pamphlet of 16 pages, reviewing old methods, and setting forth new ones. Experimental tests of different antiseptic solutions, given in seconds and minutes it takes to destroy putrefaction. Carbolic acid, thymol, salicylic acid, listerine, and chloride of zinc, in the order in which they are named, were speedily effectual in from five seconds to five minutes.

The North Carolina Teacher, a magazine devoted to Progressive Education in North Carolina, Edited by Eugene G. Harrell, is a handsome publication. If it keeps up even the standard it has set for itself, it will surely win success, and further the cause of education in the State, now so woefully superficial.

PRIZE OF £1,000 FOR CULTIVATION OF VACCINE CONTAGIUM.—The Worshipful Company of Grocers, London.—Original Research in Sanitary Science.—First Quadrennial Discovery Prize of £1000. Subject to the conditions of the Company's scheme, the Court now announces, as the matter of competition for this Prize, the following problem:

"To discover a method by which the Vaccine Contagium may be cultivated apart from the animal body in some medium or media not otherwise zymotic.—the method to be such that the Contagium may by means of it be multiplied to an indefinite extent in successive generations, and that the product after any number of such generations shall (so far as can within the time be tested) prove itself of identical potency with standard Vaccine Lymph."

The Prize is open to universal competition, British and Foreign.

Competitors for the Prize must submit their respective Treatises on or before the 31st of December, 1886, and the award will be made as soon afterwards as the circumstances of the competition shall permit.

Persons who may desire to have further particulars as to the conditions of the competition are invited to apply by letter to the CLERK OF THE GROCERS' COMPANY, Grocers' Hall, London, E. C.

Grocers' Hall, May 30th, 1883.—*London Athenæum*.

ON THE USE OF ANESTHETICS DURING LABOR.—In a paper recently read before the East Surry District of the South-eastern branch of the British Medical Association, Thomas D. Savill, M.D., indicates what he believes to be the main precautions, the observations of which would render the use of chloroform perfectly justifiable.

1. There are certain women who have a tendency to flood at every confinement, and others in whom there seems an already too great relaxation of fibre—weak anæmic females in their eighth or tenth confinement; and to these it would be unadvisable to give chloroform, except for necessity. Happily, it is not these women who suffer the most pain, but rather those strong healthy primiparæ whose pelves and general build approximate to the masculine type.

2. We should not give it when labor is complicated with severe vomiting, or with acute heart- or lung-disease, unless there be imperative call for it.

3. It should not be given to the full extent, except for operation, convulsions, or spasm of the cervix; and then it is most necessary that one person should devote his entire attention to it.

4. The inhalation should be stopped directly we find the pulse becoming very weak, or the respiration irregular. 5. Anything which makes us suspect a fatty or enfeebled cardiac wall should make us cautious in the use of chloroform. Here, as in cases other than those of labor, it is not the most extensive valvular disease (so long as it

be attenuated by compensating hypertrophy) but the atrophied or degenerate wall that constitutes the source of danger. Unfortunately, the signs of these conditions are subtle and uncertain. Fatty heart may be suspected by an exceedingly feeble cardiac impulse, combined with an almost inaudible first sound; or attacks of dyspnœa, vertigo and syncope, in the absence of anæmia, or valvular lesion; or the copious deposit of fat in other parts of the body, and the occurrence of dropsy without adequate cause. A dilated heart may be suspected by increased area of præcordial dulness, combined with epigastric and venous pulsation, and a want of correspondence between the violence of the cardiac impulse and the strength of the pulse. Pericardial adhesions also form a great source of danger. They may be suspected when the heart's apex is fixed above its normal position, and does not shift with respiration; or when there is depression instead of protrusion of intercostal spaces over the position of the apex, giving a wavy character to the cardiac impulse.

6. In all cases, we should take extra care to prevent the occurrence of hæmorrhage after birth; by giving a full dose of ergot when the head reaches the perinæum; by ceasing the chloroform immediately it is born; and by rousing the patient from her lethargy as soon as possible.—*British Medical Journal*.

FACE PRESENTATION.—Dr. Strachan, of Sunderland, writes: "A. W., aged 22, primipara, at full period, was first seen after slight dilatation of os had taken place, the face having barely engaged the pelvis, although the membranes were ruptured, and the liquor amnii was escaping. The finger touched the right malar bone and orbit. The pains were frequent but not strong, and the patient was hysterical. I gave opium and left her, and was sent for twelve hours later, when the os was fully dilated, and the face, which had now descended to about the middle plane of pelvis, was found presenting, in the first position, the right oblique diameter, with chin backwards towards right sacro-iliac-synchondrosis. As the forehead seemed decidedly to take precedence. I tried gently to make the head rotate on its transverse axis into the first cranial position with the occiput towards the left ilio-pectineal eminence, but did not succeed. this was the method recommended by the late Dr. J. Clark, but is now abandoned. Next, introducing my finger into the mouth, I endeavored to bring down the chin—the proper analogue of the occiput—at the same time assisting the natural rotation into the

fourth facial position—the left oblique diameter with the chin forwards. But all my efforts seemed fruitless to move the head in any way, especially as the pains were weak. So, after waiting two or three hours longer to see what course nature intended to adopt, and as the frontomental diameter still remained impacted in the same position, I gave chloroform, and applied the long forceps with double curve; the upper blade, which had to be introduced first, being rather difficult for introduction between the prominences of the face and the maternal parts, so as to avoid injuring either. The long straight forceps are recommended in these cases with the view of better assisting rotation, but in this instance the double-curved ones answered remarkably well, as under rather powerful transaction, accompanied by a gentle twist in the desired direction, rotation took place in the fourth position, and the face was born chin forwards, the hollow of the forceps pointing backwards. Had rotation not taken place the case would most likely have ended in craniotomy. The child was born alive, and although slightly disfigured at the time, with the caput succedaneum over the right cheek and orbit, which were both considerably swollen, it has done well; the mother has also made a good recovery.”—*British Medical Journal*.

THE NEW ANTIPYRETIC KAIRN.—Dr. Hallopeau, in a paper read at the Paris Hospital Medical Society (*Bull. de Thérap.*, March 30), gives an account of some trials he has made of the antithermic properties of the chlorhydrate of kairin, introduced to notice by Prof. Filehne, of Erlangen. Its proper name is the methylhydrate of oxyquinoline ($C_{10}H_{13}NO$), being, like quinine, a derivative of quinoline. Prof. Filehne gives from thirty to fifty centigrammes (in a fever of medium intensity) every hour, or hour and a half, the temperature becoming lower from a half to two degrees even after the first dose. After the third or fourth dose it descends to the normal or even lower, its fall being rapid in proportion to the dose, and accompanied by the profuse sweating, which soon ceases if the temperature be maintained at the normal by new doses of the kairin. During the apyrexia the patients experience a marked sense of comfort, the pulse recovering its normal frequency; but in order to maintain this state the medicine has to be continued at the above-mentioned doses, or in one gramme every two hours and a half, other-

wise the fever returns as before. Dr. Hallopeau, from the few trials which he has made of this substance, quite confirms Prof. Filehne's statements, and comes to the conclusion that of all the antipyretic agents it is the one of which, at non-poisonous doses, the action is most certain, most powerful, and most rapid, and that it constitutes a precious resource in therapeutics, enabling us to counteract with certainty the dangers which hyperpyrexia in itself induces.—*Medical Times and Gazette*.

DR. J. M. TONER.—The joint committee of the Congressional Library has ordered a bust in marble of this distinguished physician to be placed in the library. This is in recognition of the donation to the library of his extensive and valuable collection of medical and historical works. The bust will be executed by J. Q. A. Ward, the well-known sculptor.—*Louisville Medical News*.

OBITUARY.

ROBERT DRUITT, M.D.

Dr. Robert Drutt, author of "Drutt's Surgery" so well known to American Students, died in Kensington, England, 15th May at the age of 69.

M. A. WILCOX, M.D.

The subject of this notice was born in the county of Halifax, N. C., October the 9th, 1797, and quietly passed from the scene of mortal existence on the 30th of March, 1883.

He removed to Nashville, Nash County, in 1823, and was elected to the Legislature from that county in 1825. In 1826 he returned to his native county, Halifax, where he has remained ever since in the successful practice of his profession.

Dr. Wilcox was President of the County Medical Society for a long time and has always borne the reputation of an honorable physician.

High minded and dignified in demeanor, he energetically and earnestly pursued his profession, being influenced neither by the fawnings and adulation of sycophants, nor deterred from an honest and scrupulous discharge of duty by the machinations of enemies or jealous rivals. Honor, sobriety, dignity, and manly perseverance were his cardinal characteristics.

He has passed from among the busy throng of mankind, but his sterling worth as a citizen, and his elevated principle in the efficient discharge of all his professional duties will long be remembered, and fondly cherished by a large circle of his admiring countrymen.

RINGWOOD, N. C., April 21st, 1883.

G. E. M.

HENRY WATSON BETTS, M.D.

On the evening of April 11, 1883, calmly as an infant, Dr. Henry Watson Betts slept into eternity. He was born on the 2d day of February, 1856, was the son of Rev. A. D. Betts, of the M. E. Church (South). He entered North Carolina College in the Sophomore class and by arduous study graduated in two years (June, 1877). He then began the study of medicine under Dr. Paul A. Barrier, read about fifteen months and attended the University of New York in the winter of 1878. Returning in the spring, he located at Pleasant Garden Academy, in Guilford County, and served as principal of that school for ten months, at the same time prosecuting his medical studies. In July, 1880, he married Miss Lizzie, daughter of Maj. L. G. Heilez, of Mount Pleasant, N. C. In the fall of the same year he located at Albemarle, N. C., and entered upon the practice of his profession. In May, 1881, he applied to the North Carolina Board of Medical Examiners for license to practice medicine and became a member of the North Carolina Medical Society. He remained at Albemarle discharging his duties both as citizen and physician with untiring energy, until a few weeks ago he was moved to his father-in-law's at Mt. Pleasant where he died. He leaves a widow and two promising sons to mourn an irreparable loss.

The subject of this notice was a man of extraordinary talent, sterling energy, self-sacrificing. He made more than ordinary progress in his profession; was courteous and highly respected by his professional brethren; beloved by his patrons; he enjoyed the confidence, in a large degree, of the community in which he lived. In discharging his duties to suffering humanity he attended some cases of typhoid fever from which it is thought he contracted the disease from which he recovered only to be seized by that more fatal disease, phthisis. In his death the North Carolina Medical Society has lost one of its most promising young men. He was a star of the first magnitude just rose above the horizon and vanished. B AND M.

BOOKS AND PAMPHLETS RECEIVED.

Reminiscences and Memoirs of North Carolina and Eminent North Carolinians. By John H. Wheeler. Washington, D. C.: Joseph Shillington. 1883. (Price \$1. Quarto. Pp. 100.)

A Treatise on Insanity in its Medical Relations. By William A. Hammond, M.D., etc., etc. New York: D. Appleton & Company, 1, 3, and 5 Bond Street. 1883. Pp. 767. (Price \$5.00 in cloth).

Observations on Lithotomy, Lithotritry and the Early Detection of Stone in the Bladder, with a Description of a New Method of Tapping the Bladder. By Reginald Harrison, F.R.C.S. London: New Burlington St. 1883.

Headaches: Their Nature, Causes, and Treatment. By William Henry Day, M.D. Fourth Edition. With Illustrations. Philadelphia: P. Blakiston Son & Co., 1012 Walnut Street. 1883. (Price in paper, 75 cents; cloth, \$1.25.)

The Practitioner's Ready Reference Book. A Handy Guide in Office and Bedside Practice. By Richard J. Dunglison, A.M., M.D. Third Edition. Thoroughly Revised and Enlarged. Philadelphia: P. Blakiston Son & Company. 1883. Pp. 529. Price \$3.50.

The Medical and Surgical History of the War, &c. Part III. Vol. II. Surgical History. Washington: Prepared under the Direction of Joseph K. Barnes, Surgeon-General U. S. Army. By George A. Otis, Surgeon U. S. A., and D. L. Huntington, Surgeon U. S. A. Government Printing Office. 1883.

A Treatise on Therapeutics Comprising Materia Medica and Toxicology. With especial reference to the application of the Physiological Action of Drugs to Clinical Medicine. By H. C. Wood, Jr., M.D., etc. Fourth Edition. Revised and Enlarged. Philadelphia: J. B. Lippincott & Co. 1883. Pp. 736. [Price \$6.]

Medical and Surgical Aspects of In-Knee-(Genu-Valgum): Its Relation to Rickets; Its Prevention and its Treatment with and without Surgical Operation. By W. J. Little, M.D., F.R.C.P. Assisted by E. Muirhead Little, M.R.C.S. Illustrated by upwards of Fifty Figures and Diagrams. D. Appleton & Co. New York: 1882. Pp. 160.







